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ACIDIC PRECIPITATION IN ONTARIO STUDY
1983 DAILY PRECIPITATION CHEMISTRY LISTINGS

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AIR QUALITY AND METEOROLOGY SECTION
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This report was prepared by David Chung of the APIOS Atmospheric Deposition and Chemistry Program. However, the data themselves are a product of the combined efforts of many individuals. Precipitation samples were collected by a large number of site operators, whose names cannot be individually mentioned here, under the coordination of the APIOS environmental technicians Steve Elliott (in Southwestern Region), Dave Allcock (in Southeastern Region), Wim Smits (in Northwestern Region) and J.P. Varto (in Central Region). Sample handling was carried out by Dan Orr and Scott Kennedy, and overall network coordination by Bill Bardswick of the Air Resource Branch. Chemical Analyses were performed at the Laboratory Services and Applied Research Branch under the coordination of Frank Tomassini. All enquiries regarding the reported data should be directed to Walter Chan, Coordinator, Atmospheric Deposition and Chemistry Program, at (416) 965-1634.

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Melbourne	01	10
North Easthope	03	19
Wellesley	04	31

PART IV CENTRAL REGION DAILY PRECIPITATION CHEMISTRY LISTINGS

<u>Station Name</u>	<u>Map Ref. No.</u>	
Balsam Lake	06	43
Dorset	08	55
Nithgrove	07	70
Raven Lake	05	82

PART V SOUTHEASTERN REGION DAILY PRECIPITATION CHEMISTRY LISTINGS

<u>Station Name</u>	<u>Map Ref. No.</u>	
Charleston Lake	11	94
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PART VI NORTHWESTERN REGION DAILY PRECIPITATION CHEMISTRY LISTINGS

<u>Station Name</u>	<u>Map Ref. No.</u>	
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PART I

INTRODUCTION

INTRODUCTION

The data listed herein are a summary of the 1983 results acquired from the APIOS daily precipitation sampling network. All data presented in this report have been screened for validity. Remarks and qualifications have been appended to records, and/or results where necessary. The screening procedure involved checking each record for chemical analysis integrity (e.g., ionic balance, observed vs. theoretical conductance). Gross limit checks were applied to the results. Upper limit were determined as $M + 2S$ where median (M) and scale (S) represent robust estimates of mean and standard deviation respectively. Scale of the distribution was determined from interquartile distance, i.e. $S=0.74$ (3rd quartile - 1st quartile) based upon logarithmically transformed results. In a situation where the distribution is significantly bounded by reported detection limits, S may be estimated as follows, $S=1.48$ (3rd quartile - 2nd quartile). All lower gross limits were specified as zero. The data were also screened for outliers statistically by applying the Dixon Ratio test to the highest and lowest values observed in each region on a daily basis. Outliers were determined at the 95% level of confidence. Records and/or results deemed unreliable were flagged but not deleted. Detailed description of the validation procedures as applied to this data set is available from the Ministry upon request.

Station Identification

The station identification is defined by four descriptive fields (e.g. Dorset/Daily/Aerochem #108). The first field refers to the sampling location. The second and third fields describe the sampling interval and the instrumentation used respectively. The last numeric field refers to the index code utilized on the location map.

Daily Precipitation Chemistry Listings

Sample type, as coded in the data listings, represents the best guess of the type of event which was sampled. All chemical analyses were done on unfiltered samples. Lab pH entries represent pH measurements at the main MOE Laboratory in Toronto while field pH entries represent measurements at regional laboratories. Remark codes (e.g., U,A) appended to individual results are defined in a later section. The tabulated results for "Free H"

were calculated from the reported Lab pH. Total hydrogen results, reported as "Total H", represent a titration of the sample with NaOH to an end point pH of 8.3.

Calculation of Equivalent Precipitation Depth (mm)

$$\text{Equivalent Precipitation Depth (mm)} = \frac{\text{Volume Collected (ml)} \times 15.6}{1000}$$

Calculation of Observed Sampling Efficiency

$$\% \text{ Efficiency} = \frac{\text{Equivalent Precipitation Depth (mm)} \times 100 \%}{\text{Gauge Depth (mm)}}$$

If the sample collection efficiency is less than 50% or greater than 120%, and if any of the field comment codes which affect sample collection efficiency (i.e. "F", "G", "H", "I", "J", "L", "P", and "M") is appended to the sample record, then the sample collection efficiency is flagged as unreliable.

Field Comment Code Index

A - Insects in sample	H - Volume incorrect
B - Leaves in sample	I - Event(s) missed
C - Particulates in sample	J - Wet side open when not precipitating
D - Fibres in sample	K - No precipitation collected
E - Sample not submitted	L - Part of event missed
F - Sampler malfunctioned	M - Dry side open when precipitating
G - Sample spilled or leaked	P - Gauge depth incorrect
	Q - Other

Office Comment Code Index

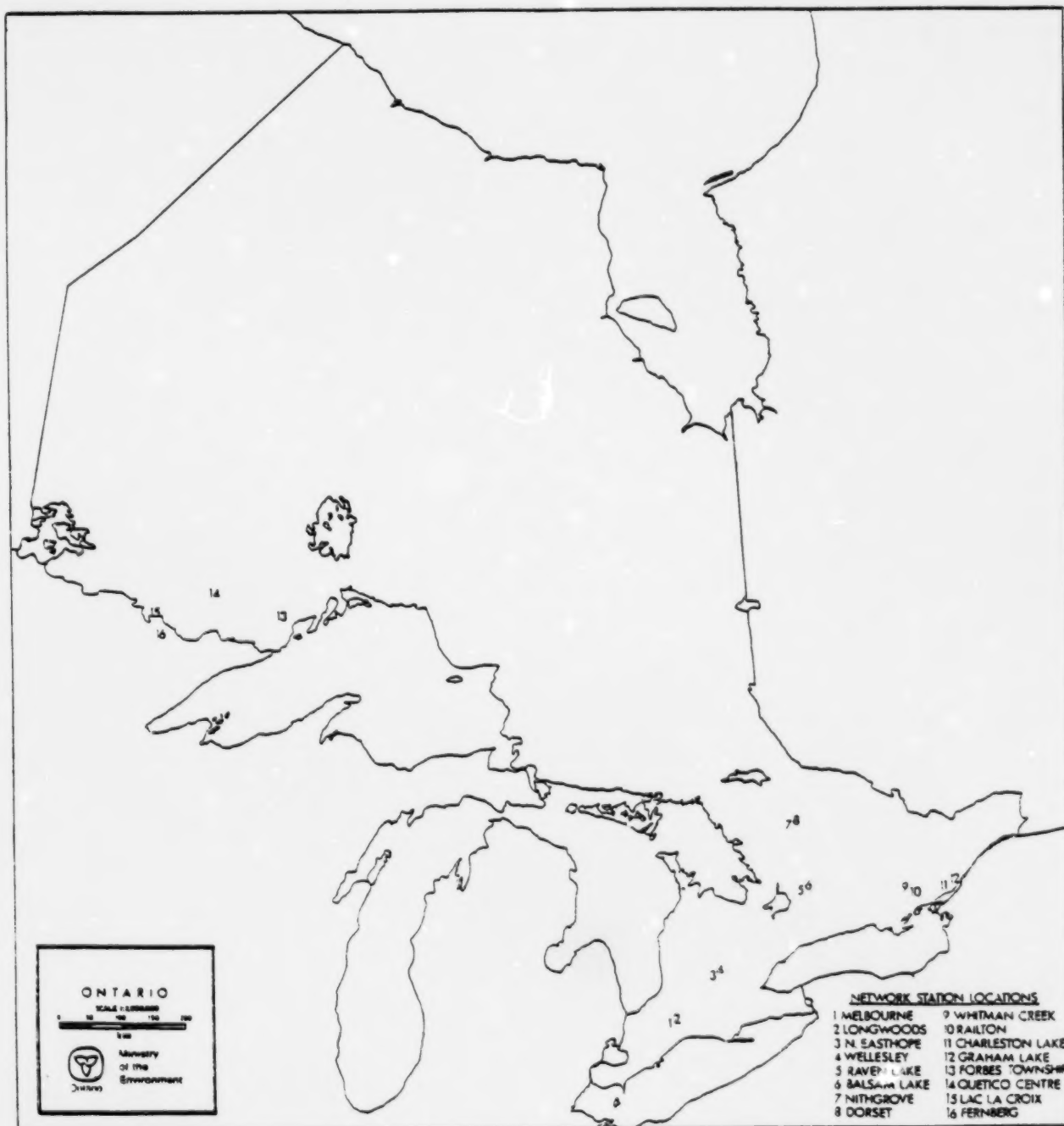
- | | |
|---|--|
| C - Poor calculated vs. observed conductance comparison | Y - Collected sample remained in sampler in excess of 24 hours with event(s) only occurred in the first 24 hours |
| J - Δ pH Large | Y2 - Sampling period equals to two days |
| H - Poor calculated vs. observed pH comparison | Y3 - Sampling period equals to three days |
| M - Poor ionic balance | Y4 - Sampling period equals to four days |
| N - Abnormal sample collection efficiency | Y5 - Sampling period equals to five days |
| T - Free H^+ exceeds total H^+ | Z - Non-standard collection period with one or more events collected after 24 hours |

Result Remark Code Index

- > - actual results greater than value reported
- < - actual result less than value reported
- T - actual result less than criterion of detection
- W - no response, minimum possible results reported
- A - approximate value
- U - unreliable result
- G - exceedance of Gross Limit Checks
- D - outlier of Dixon Ratio Test
- B - exceedance of Gross Limit Checks and Outlier of Dixon Ratio Tests

PART II

STATION DESCRIPTION AND LOCATION MAP



APIOS DAILY PRECIPITATION AND AIR MONITORING NETWORK SITE LOCATIONS *

AREA	MOE REGION	STATION NAME	ELEVATION (m above MSL)	LATITUDE (North)	LONGITUDE (West)	UTM COORDINATES (Northing) (Easting)
London	Southwestern	Longwoods Conservations Area*	239	42°53'02"	81°28'50"	4747600 460700
		Melbourne	213	42°47'15"	81°33'23"	4737100 454500
		North Easthope	375	43°24'21"	80°53'35"	4805650 508650
		Wellesley	344	43°28'13"	80°45'35"	4812700 519600
Dorset	Central	Dorset Laboratory*	320	45°13'23"	78°55'49"	5009600 662450
		Nithgrove	325	45°12'01"	79°04'14"	5006800 651600
		Balsam Lake	259	44°37'35"	78°51'22"	4943500 670170
		Provincial Park				
		Raven Lake	274	44°36'40"	78°54'43"	4941550 665700
Kingston	Southeastern	Charleston Lake	92	44°29'54"	76°02'30"	4927500 417150
		Provincial Park*				
		Graham Lake	130	44°35'22"	75°51'44"	4937450 431550
		Railton	156	44°22'34"	76°35'33"	4914700 373200
Thunder Bay	Northwestern	Whitman Creek	137	44°29'07"	76°49'19"	4927200 355100
		Fernberg*	506	47°56'51"	91°29'26"	5311000 612000
		Lac La Croix	368	48°21'14"	92°12'32"	5355900 558400
		Forbes Township	324	48°34'58"	89°38'56"	5384150 304800
		Quetico Centre	420	48°24'44"	91°12'08"	5399750 632100

* All sites monitor precipitation concentrations. Sites labelled (*) also monitor air concentrations.

PART III

SOUTHWESTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS



ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGHOOPS/DAILY/AEROCHEN #02													PAGE : 1
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE		
JAN 7,83	JAN 6,83	800 900	800 900	1	1.5	2	17492	2	1	100	CD		
JAN 11,83	JAN 10,83	600 815	1600 1900	1	17.3	2	17495	2	1	101	C		
JAN 12,83	JAN 11,83	815 900	800 900	3	4.7	2	17498	2	1	55	EK	NH	
JAN 13,83	JAN 12,83	900 900	900 1800	2	1.1	2	17501	2	1	44	CD		
JAN 15,83	JAN 14,83	800 900	1800 2300	3	6.3	2	17504	2	1	44	EK		
JAN 17,83	JAN 16,83	800 900	800 900	2	0.7	2	17510	2	1	44	EK	Y2	
JAN 19,83	JAN 17,83	900 1000	1200 600	2	3.7	2	17513	2	1	11	CL	N	
JAN 23,83	JAN 22,83	800 900	800 900	1	1.7	2	17516	2	1	U	CL		
JAN 24,83	JAN 23,83	900 900	900 1900	3	0.7	2	17519	2	1	U	CL	N	
JAN 25,83	JAN 24,83	900 1000	800 900	3	1.8	2	17522	2	1	U	CL		
JAN 31,83	JAN 30,83	800 900	800 1200	3	3.5	2	17525	2	1	116	C		
FEB 2,83	FEB 1,83	800 1230	800 1230	1	8.7	2	17528	2	1	73	C		
FEB 3,83	FEB 2,83	1230 1000	1230 730	1	2.9	2	17531	2	1	112	EK		
FEB 4,83	FEB 3,83	1000 1000	1300 1000	2	2.7	2	17534	2	1	112	EK		
FEB 5,83	FEB 4,83	1000 900	1000 1600	2	2.1	2	17537	2	1	112	EK		
FEB 7,83	FEB 6,83	800 900	1800 900	2	6.5	2	17540	2	1	112	EK		
FEB 8,83	FEB 7,83	900 1000	900 1500	2	0.7	2	17543	2	1	96	CD		
FEB 17,83	FEB 16,83	800 900	2100 900	3	1.3	2	17546	2	1	112	EK		
FEB 19,83	FEB 18,83	800 1000	400 600	2	0.3	2	17549	2	1	112	EK		
FEB 22,83	FEB 21,83	800 800	500 630	1	10.1	2	17552	2	1	112	EK		
FEB 23,83	FEB 22,83	800 900	1500 100	1	0.5	2	17555	2	1	102	C		
FEB 24,83	FEB 23,83	900 1000	800 900	1	1.1	2	17558	2	1	153	C	N	
MAR 7,83	MAR 6,83	800 900	2200 530	1	1.5	2	17561	2	1	140	C	N	
MAR 8,83	MAR 7,83	900 1030	1900 430	1	2.5	2	17564	2	1	117	C		
MAR 9,83	MAR 8,83	1030 900	1500 2200	1	0.5	2	17567	2	1	37	C	N	
MAR 10,83	MAR 9,83	900 930	400 730	1	4.3	2	17570	2	1	69	C		
MAR 19,83	MAR 18,83	800 800	1900 800	1	8.1	2	17573	2	1	85	C	NH	
MAR 20,83	MAR 19,83	800 800	800 1200	3	6.3	2	17576	2	1	85	EK		
MAR 21,83	MAR 20,83	800 1030	2100 1030	3	4.3	2	17579	2	1	85	EK		
MAR 22,83	MAR 21,83	1030 1000	1030 1000	2	0.7	2	17582	2	1	85	EK		
MAR 23,83	MAR 22,83	1000 1030	1030 900	2	6.8	2	17585	2	1	85	EK		
MAR 27,83	MAR 26,83	800 900	800 900	3	3.6	2	17588	2	1	36	C	N	
APR 3,83	APR 2,83	800 900	1500 2300	1	1.3	2	17594	2	1	122	C	N	
APR 4,83	APR 3,83	900 900	800 900	1	10.9	2	17597	2	1	108	D		
APR 7,83	APR 6,83	800 900	1000 830	1	29.7	2	17600	2	1	95	C		
APR 10,83	APR 9,83	800 800	1900 100	1	1.1	2	17603	2	1	100	C		
APR 11,83	APR 10,83	800 900	800 900	1	10.6	2	17606	2	1	93	C		
APR 14,83	APR 13,83	800 900	2300 900	1	11.2	2	17609	2	1	101	CD		
APR 15,83	APR 14,83	900 900	900 1700	1	2.2	2	17612	2	1	100	C		
APR 17,83	APR 16,83	800 800	800 800	2	2.2	2	17615	2	1	100	EK		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CN	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	PAGE : 2
JAN 7.83	JAN 6.83	97.0	*****	*****	4.14	0.1088	4.05	1.88	
JAN 11.83	JAN 10.83	1122.0	24.5	4.31	4.29	0.0760	2.30	0.29	
JAN 12.83	JAN 11.83	169.0	21.7	*****	4.50	0.0574	2.40	0.50	
JAN 13.83	JAN 12.83	*****	*****	*****	*****	*****	*****	*****	
JAN 15.83	JAN 14.83	178.0	U 91.5	3.81	U 3.87	0.1852	5.20	2.20	
JAN 17.83	JAN 16.83	*****	*****	*****	*****	*****	*****	*****	
JAN 19.83	JAN 17.83	*****	*****	*****	*****	*****	*****	*****	
JAN 23.83	JAN 22.83	13.0	*****	*****	*****	*****	*****	*****	
JAN 24.83	JAN 23.83	29.0	*****	*****	3.86	0.2100	*****	*****	
JAN 25.83	JAN 24.83	44.0	*****	*****	U 3.98	G 0.1946	11.45	2.10	
JAN 31.83	JAN 30.83	262.0	37.3	4.10	4.06	0.1162	3.40	0.56	
FEB 2.83	FEB 1.83	408.0	26.6	4.25	4.26	0.0826	2.50	0.31	
FEB 3.83	FEB 2.83	210.0	57.0	3.92	3.89	0.1644	3.50	1.08	
FEB 4.83	FEB 3.83	*****	*****	*****	*****	*****	*****	*****	
FEB 5.83	FEB 4.83	*****	*****	*****	*****	*****	*****	*****	
FEB 7.83	FEB 6.83	*****	*****	*****	*****	*****	*****	*****	
FEB 8.83	FEB 7.83	80.0	*****	*****	U 3.48	G 0.3520	8.00	3.50	
FEB 17.83	FEB 16.83	*****	*****	*****	*****	*****	*****	*****	
FEB 19.83	FEB 18.83	10.0	*****	*****	*****	*****	*****	*****	
FEB 22.83	FEB 21.83	666.0	U 101.8	3.62	3.64	0.2698	8.05	1.40	
FEB 23.83	FEB 22.83	*****	*****	*****	*****	*****	*****	*****	
FEB 24.83	FEB 23.83	*****	*****	*****	*****	*****	*****	*****	
MAR 7.83	MAR 6.83	108.0	*****	*****	D 4.73	0.0388	2.40	0.38	
MAR 8.83	MAR 7.83	135.0	38.2	*****	4.31	0.0784	4.30	1.19	
MAR 9.83	MAR 8.83	188.0	60.0	3.98	3.90	0.1456	4.25	1.21	
MAR 10.83	MAR 9.83	12.0	*****	*****	*****	*****	*****	*****	
MAR 19.83	MAR 18.83	191.0	17.6	*****	4.99	0.0354	2.25	0.47	
MAR 20.83	MAR 19.83	443.0	D 15.6	*****	4.61	0.0472	1.65	0.21	
MAR 21.83	MAR 20.83	*****	*****	*****	*****	*****	*****	*****	
MAR 22.83	MAR 21.83	*****	*****	*****	*****	*****	*****	*****	
MAR 23.83	MAR 22.83	*****	*****	*****	*****	*****	*****	*****	
MAR 27.83	MAR 26.83	161.0	21.7	*****	4.51	0.1572	2.10	0.32	
APR 3.83	APR 2.83	283.0	35.9	4.25	4.29	0.0798	4.80	0.71	
APR 4.83	APR 3.83	90.0	*****	*****	4.13	0.1052	3.25	0.61	
APR 7.83	APR 6.83	665.0	55.8	4.03	4.01	0.2720	4.50	0.89	
APR 10.83	APR 9.83	1905.0	22.1	4.44	4.42	0.0584	1.80	0.30	
APR 11.83	APR 10.83	66.0	D 4.03	*****	*****	*****	4.15	0.94	
APR 14.83	APR 13.83	689.0	43.1	4.03	4.15	0.1012	3.70	0.57	
APR 15.83	APR 14.83	725.0	27.3	4.35	4.37	0.0654	2.95	0.31	
APR 17.83	APR 16.83	*****	*****	*****	*****	*****	*****	*****	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGHOODS/DAILY/AEROCHEM #02									
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L	
JAN 7,83	JAN 6,83	U 2.02	0.48	U 0.320	0.090	0.125	0.750	0.0724	
JAN 11,83	JAN 10,83	0.11	0.13	0.020	0.035	0.015	0.168	0.0513	
JAN 12,83	JAN 11,83	0.28	0.48	0.060	0.080	0.075	0.720	0.0316	
JAN 13,83	JAN 12,83	*****	*****	*****	*****	*****	*****	*****	
JAN 15,83	JAN 14,83	U 1.97	1.00	U 0.430	0.080	0.515	1.010	U 0.1349	
JAN 17,83	JAN 16,83	*****	*****	*****	*****	*****	*****	*****	
JAN 19,83	JAN 17,83	*****	*****	*****	*****	*****	*****	*****	
JAN 23,83	JAN 22,83	*****	*****	*****	*****	*****	*****	0.1380	
JAN 24,83	JAN 23,83	*****	*****	*****	*****	*****	*****	U 0.1047	
JAN 25,83	JAN 24,83	*****	U 1.24	*****	*****	*****	*****	0.0871	
JAN 31,83	JAN 30,83	0.15	0.18	0.040	0.040	0.035	0.420	0.0550	
FEB 2,83	FEB 1,83	0.08	0.12	0.030	0.020	0.055	0.228	0.1288	
FEB 3,83	FEB 2,83	0.32	0.59	0.090	0.095	0.135	*****	*****	
FEB 4,83	FEB 3,83	*****	*****	*****	*****	*****	*****	*****	
FEB 5,83	FEB 4,83	*****	*****	*****	*****	*****	*****	*****	
FEB 6,83	FEB 5,83	*****	*****	*****	*****	*****	*****	*****	
FEB 7,83	FEB 6,83	*****	*****	*****	*****	*****	*****	*****	
FEB 8,83	FEB 7,83	*****	*****	*****	*****	*****	*****	U 0.3311	
FEB 17,83	FEB 16,83	*****	U 1.30	*****	*****	*****	*****	*****	
FEB 19,83	FEB 18,83	*****	*****	*****	*****	*****	*****	*****	
FEB 22,83	FEB 21,83	*****	*****	*****	*****	*****	*****	*****	
FEB 23,83	FEB 22,83	0.27	0.64	0.055	0.050	0.205	0.730	0.2291	
FEB 24,83	FEB 23,83	*****	*****	*****	*****	*****	*****	*****	
MAR 7,83	MAR 6,83	1.03	0.36	0.150	0.100	0.185	*****	0.0186	
MAR 8,83	MAR 7,83	U 1.68	0.53	0.200	0.115	0.260	*****	0.0490	
MAR 9,83	MAR 8,83	0.32	0.28	0.050	0.035	0.070	0.690	0.1259	
MAR 10,83	MAR 9,83	*****	*****	*****	*****	*****	*****	*****	
MAR 19,83	MAR 18,83	D 0.81	0.38	0.160	0.120	0.215	0.148	0.0102	
MAR 20,83	MAR 19,83	D 0.29	0.80	0.095	0.040	0.030	0.120	0.0245	
MAR 21,83	MAR 20,83	*****	*****	*****	*****	*****	*****	*****	
MAR 22,83	MAR 21,83	*****	*****	*****	*****	*****	*****	*****	
MAR 23,83	MAR 22,83	*****	*****	*****	*****	*****	*****	*****	
MAR 27,83	MAR 26,83	0.43	0.26	0.070	0.160	0.170	0.230	0.0309	
APR 3,83	APR 2,83	1.22	0.32	U 0.260	0.110	0.140	0.264	0.0513	
APR 4,83	APR 3,83	0.03	0.18	0.040	0.050	0.060	*****	0.0741	
APR 7,83	APR 6,83	0.35	0.21	0.040	0.050	0.050	0.380	0.0977	
APR 10,83	APR 9,83	0.14	0.06	0.020	0.030	0.030	0.086	0.0360	
APR 11,83	APR 10,83	0.46	0.35	0.080	0.210	0.310	*****	*****	
APR 14,83	APR 13,83	0.34	0.20	0.030	0.085	0.035	0.228	0.0708	
APR 15,83	APR 14,83	0.32	0.17	0.050	0.040	0.060	0.214	0.0427	
APR 17,83	APR 16,83	*****	*****	*****	*****	*****	*****	*****	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02										PAGE : 4	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		
APR 16,83	APR 17,83	800 800	800 800	3	4.6	2	17618	2	1	38	D N
APR 29,83	APR 29,83	745 800	810 1400	1	13.0	2	17621	2	1	101	C JH
MAY 1,83	APR 30,83	800 900	830 1600	1	18.6	1	17624	2	1	104	AC
MAY 2,83	MAY 1,83	900 900	1430 100	1	21.8	1	17627	2	1	99	C
MAY 3,83	MAY 2,83	900 900	1400 1630	1	25.6	1	17630	2	1	98	C
MAY 4,83	MAY 3,83	900 900	1030 2300	1	7.4	1	17633	2	1	98	C
MAY 5,83	MAY 4,83	900 1030	1830 1930	1	2.0	1	17636	2	1	86	C H
MAY 8,83	MAY 7,83	800 900	1800 2400	1	13.0	1	17639	2	1	94	D
MAY 15,83	MAY 14,83	800 1000	800 1000	1	5.9	1	17642	2	1	90	CD
MAY 20,83	MAY 19,83	800 1100	920 2230	1	30.6	1	17645	2	1	119	BC HM
MAY 23,83	MAY 22,83	800 900	830 1030	1	9.2	1	17648	2	1	98	C
MAY 24,83	MAY 23,83	900 1030	800 1030	1	1.4	1	17651	2	1	86	C
MAY 26,83	MAY 25,83	800 930	1000 1730	1	4.8	1	17654	2	1	78	G U
MAY 30,83	MAY 29,83	800 930	1000 1200	1	15.2	1	17657	2	1	104	C
JUN 1,83	MAY 31,83	800 930	1130 2200	1	10.0	1	17660	2	1	99	C H
JUN 4,83	JUN 3,83	800 900	1600 2400	1	14.0	1	17663	2	1	96	C
JUN 6,83	JUN 5,83	800 1000	2300 1000	1	8.6	1	17666	2	1	98	C
JUN 7,83	JUN 6,83	1000 900	1000 1200	1	1.2	1	17669	2	1	26	C M
JUN 10,83	JUN 9,83	800 800	500 630	1	2.4	1	17673	2	1	94	CD
JUN 28,83	JUN 27,83	800 1000	1500 1000	1	20.0	1	17676	2	1	91	ACG
JUN 29,83	JUN 28,83	1000 1000	800 1600	1	1.4	1	17679	2	1	63	C U
JUL 1,83	JUN 30,83	800 1600	1700 1830	1	3.0	1	17682	2	1	84	C M
JUL 5,83	JUL 4,83	800 1030	1500 1630	1	18.7	1	17685	2	1	102	C
JUL 18,83	JUL 17,83	800 930	1330 1800	1	10.4	1	17688	2	1	101	C J
JUL 26,83	JUL 20,83	800 1300	1500 1800	1	6.0	1	17691	2	1	97	Y6
JUL 30,83	JUL 29,83	800 1200	1000 300	1	25.0	1	17694	2	1	141	C N
JUL 31,83	JUL 30,83	1200 1100	2300 100	1	9.3	1	17697	2	1	105	C
AUG 1,83	JUL 31,83	1100 1130	115 230	1	25.0	1	17700	2	1	105	C
AUG 4,83	AUG 3,83	800 800	800 800	1	21.4	1	17703	2	1	100	C
AUG 9,83	AUG 8,83	800 800	1800 2200	1	19.4	1	17706	2	1	94	AC
AUG 11,83	AUG 10,83	800 1130	530 1130	1	43.6	1	17709	2	1	100	C
AUG 12,83	AUG 11,83	1130 1200	1130 1400	1	1.1	1	17712	2	1	66	C
AUG 22,83	AUG 21,83	800 800	400 500	1	2.0	1	17722	2	1	74	C
SEP 2,83	AUG 30,83	800 800	800 800	1	19.2	1	17725	2	1	92	C Y3
SEP 7,83	SEP 6,83	800 830	830 2100	1	3.0	1	17720	2	1	71	C
SEP 12,83	SEP 11,83	800 900	800 800	1	1.7	1	17718	2	1	14	C N
SEP 16,83	SEP 15,83	800 800	600 800	1	11.2	1	17734	2	1	100	C
SEP 17,83	SEP 16,83	800 900	800 1700	1	15.2	1	17732	2	1	97	T
SEP 19,83	SEP 18,83	800 800	200 500	1	3.0	1	17717	2	1	75	C
SEP 21,83	SEP 20,83	800 800	2400 500	1	30.2	1	17730	2	1	22	C N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
APR 18,83	APR 17,83	114.0	*****	*****	4.41	0.0752	1.65	0.70	
APR 29,83	APR 28,83	848.0	16.6	4.69	G	0.0238	3.00	0.34	
MAY 1,83	APR 30,83	1247.0	21.4	4.21		0.0618	2.05	0.33	
MAY 2,83	MAY 1,83	1395.0	24.5	4.19		0.0628	2.35	0.22	
MAY 3,83	MAY 2,83	1613.0	20.9	4.43		0.0440	2.65	0.36	
MAY 4,83	MAY 3,83	468.0	27.5	4.13		0.0768	3.00	0.18	
MAY 5,83	MAY 4,83	111.0	*****	*****	G	0.0330	4.80	1.44	
MAY 6,83	MAY 5,83	786.0	16.8	4.44	D	0.0390	2.70	0.20	
MAY 7,83	MAY 6,83	341.0	12.8	4.58		0.0292	1.95	0.21	
MAY 15,83	MAY 14,83	2348.0	22.1	4.18		0.0644	2.45	0.14	
MAY 20,83	MAY 19,83	581.0	33.8	4.07		0.0908	3.15	0.35	
MAY 23,83	MAY 22,83	78.0	*****	*****	*****	*****	3.55	0.56	
MAY 24,83	MAY 23,83	242.0	40.4	3.97		0.1022	3.70	0.46	
MAY 26,83	MAY 25,83	1023.0	39.4	4.01		0.1066	3.40	0.36	
MAY 30,83	MAY 29,83	635.0	19.4	4.47		0.0478	2.45	0.41	
JUN 1,83	MAY 31,83	869.0	53.8	3.82		0.1368	4.50	0.64	
JUN 4,83	JUN 3,83	541.0	9.9	4.59		0.0304	1.10	0.18	
JUN 6,83	JUN 5,83	20.0	*****	*****	G	0.0178	*****	*****	
JUN 7,83	JUN 6,83	146.0	*****	*****		0.1066	5.80	0.93	
JUN 10,83	JUN 9,83	1179.0	67.0	3.94		0.1328	9.25	0.85	
JUN 28,83	JUN 27,83	57.0	*****	*****	U	0.0138	0.75	0.07	
JUN 29,83	JUN 28,83	162.0	*****	*****		0.2120	8.05	0.88	
JUL 1,83	JUN 30,83	1233.0	13.2	4.48		0.0386	1.55	0.16	
JUL 5,83	JUL 4,83	674.0	19.5	5.75	U	0.0206	3.50	0.63	
JUL 18,83	JUL 17,83	376.0	20.0	4.79		0.0392	3.20	0.69	
JUL 26,83	JUL 20,83	2260.0	35.5	4.13		0.0842	3.75	0.48	
JUL 30,83	JUL 29,83	631.0	47.3	3.96	U	0.1044	5.10	0.64	
JUL 31,83	JUL 30,83	1693.0	29.0	4.25		0.0668	3.55	0.33	
AUG 1,83	JUL 31,83	1381.0	34.5	4.08		0.0844	3.45	0.38	
AUG 4,83	AUG 3,83	1177.0	19.5	4.41		0.0394	3.00	0.35	
AUG 9,83	AUG 8,83	2812.0	33.3	4.07		0.0820	3.80	0.30	
AUG 11,83	AUG 10,83	47.0	*****	*****	D	0.1834	9.10	0.78	
AUG 12,83	AUG 11,83	96.0	*****	*****		0.1244	6.10	0.95	
AUG 22,83	AUG 21,83	1144.0	24.6	3.95		0.0652	3.75	0.44	
SEP 2,83	AUG 30,83	137.0	64.0	*****		0.1288	7.20	0.70	
SEP 7,83	SEP 6,83	16.0	*****	*****	U	0.0200	*****	*****	
SEP 12,83	SEP 11,83	720.0	44.7	3.70		0.0886	2.90	0.70	
SEP 16,83	SEP 15,83	952.0	38.6	3.79		0.0610	3.95	0.35	
SEP 17,83	SEP 16,83	146.0	36.5	*****		0.0758	3.70	0.53	
SEP 19,83	SEP 18,83	440.0	10.2	*****		0.0320	0.90	0.10	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 18,83	APR 17,83	0.29	0.18	0.050	0.045	0.035	0.326	0.0369
APR 29,83	APR 28,83	0.84	0.27	0.170	0.125	0.165	0.540	0.0030
MAY 1,83	APR 30,83	0.15	0.08	0.035	0.035	0.045	0.292	0.0355
MAY 2,83	MAY 1,83	0.10	0.04	0.030	0.030	0.045	0.260	0.0389
MAY 3,83	MAY 2,83	0.49	0.20	0.085	0.070	0.190	0.460	0.0214
MAY 4,83	MAY 3,83	0.20	0.10	0.025	0.045	0.045	0.140	0.0537
MAY 5,83	MAY 4,83	1.52	0.29	0.310	0.115	0.110	1.490	0.0030
MAY 6,83	MAY 5,83	0.59	0.15	0.100	0.055	0.140	0.248	0.0138
MAY 15,83	MAY 14,83	0.40	0.16	0.070	0.060	0.050	0.260	0.0083
MAY 20,83	MAY 19,83	0.82	0.06	0.025	0.030	0.010	0.174	0.0363
MAY 23,83	MAY 22,83	0.11	0.17	0.020	0.055	0.050	0.322	0.0550
MAY 24,83	MAY 23,83	0.75	0.28	0.155	0.090	0.110	0.470	0.0000
MAY 26,83	MAY 25,83	0.25	0.18	0.050	0.060	0.060	0.420	0.0676
MAY 30,83	MAY 29,83	0.10	0.11	0.030	0.030	0.025	0.310	0.0724
JUN 1,83	MAY 31,83	0.41	0.12	0.080	0.060	0.025	0.620	0.0209
JUN 4,83	JUN 3,83	0.19	0.17	0.045	0.020	0.035	0.226	0.1047
JUN 6,83	JUN 5,83	0.12	0.05	0.030	0.020	0.025	0.250	0.0098
JUN 7,83	JUN 6,83	0.85	0.30	0.185	0.055	0.090	0.730	0.0005
JUN 10,83	JUN 9,83	0.79	0.27	0.135	0.100	0.130	1.540	0.0676
JUN 28,83	JUN 27,83	0.43	0.31	0.075	0.035	0.065	0.370	0.0813
JUL 1,83	JUN 30,83	0.20	0.12	0.040	0.015	0.060	0.150	0.0148
JUL 5,83	JUL 4,83	1.45	0.22	0.280	0.060	0.060	0.730	0.0002
JUL 16,83	JUL 17,83	1.11	0.26	0.170	0.050	0.065	0.590	0.0132
JUL 26,83	JUL 20,83	0.40	0.15	0.065	0.035	0.065	0.332	0.0603
JUL 30,83	JUL 29,83	0.39	0.39	0.080	0.315	0.265	0.530	0.0741
AUG 1,83	JUL 31,83	0.15	0.09	0.045	0.040	0.030	0.580	0.0447
AUG 4,83	AUG 3,83	0.20	0.11	0.040	0.035	0.035	0.330	0.0617
AUG 9,83	AUG 8,83	0.57	0.115	0.115	0.055	0.050	0.530	0.0162
AUG 11,83	AUG 10,83	0.15	0.11	0.030	0.030	0.030	0.440	0.0562
AUG 12,83	AUG 11,83	0.85	0.35	0.160	0.050	0.065	0.292	0.1023
AUG 22,83	AUG 21,83	1.11	0.20	0.055	0.020	0.025	0.620	0.0891
SEP 2,83	AUG 30,83	0.34	0.10	0.055	0.020	0.025	0.590	0.0447
SEP 7,83	SEP 6,83	0.74	0.22	0.105	0.055	0.160	0.0871	0.0871
SEP 12,83	SEP 11,83	0.28	0.20	0.030	0.030	0.020	0.156	0.0001
SEP 16,83	SEP 15,83	0.15	0.09	0.015	0.065	0.040	0.490	0.0794
SEP 17,83	SEP 16,83	0.54	0.12	0.060	0.055	0.065	0.334	0.0631
SEP 19,83	SEP 18,83	0.09	0.03	0.005	0.005	0.005	0.086	0.0457
SEP 21,83	SEP 20,83	0.09	0.03	0.005	0.005	0.005	0.005	0.0170

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : LONGWOODS/DAILY/AEROCHEM										#02	PAGE : 7	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI-ENCY (%)	COMMENTS FIELD OFFICE	
				01-RAIN		01-STD.		02-APIOS	01-MOE			
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES			
				03-COMP/04-OTHER								
SEP 26,83	SEP 25,83	800 800	2030 2230	1	1.2	1	17728	2	1	31	C	
OCT 4,83	OCT 3,83	800 830	2000 2030	1	1.0	1	17750	2	1	26	C	
OCT 5,83	OCT 4,83	830 1030	800 1030	1	4.2	1	17748	2	1	99	C	
OCT 6,83	OCT 5,83	1030 1000	1000 1500	1	1.6	1	17746	2	1	53	C	
OCT 9,83	OCT 8,83	830 900	1000 1500	1	8.2	1	17744	2	1	101		
OCT 12,83	OCT 11,83	800 900	400 900	1	8.2	1	17742	2	1	91	C	
OCT 13,83	OCT 12,83	1000 1000	1000 1500	1	3.2	1	17740	2	1	69	C	
OCT 14,83	OCT 13,83	1000 900	1330 1900	1	5.6	1	17738	2	1	81	C	
OCT 17,83	OCT 16,83	800 800	1700 2000	1	1.2	1	17736	2	1	61	C	
OCT 23,83	OCT 22,83	800 900	1300 500	1	20.8	1	17752	2	1	94		
OCT 24,83	OCT 23,83	900 830	1000 500	1	0.8	1	17754	2	1	19		
OCT 26,83	OCT 25,83	800 1200	1400 2200	1	1.4	1	17756	2	1	46	C	
OCT 27,83	OCT 26,83	1200 930	1600 1700	1	0.8	1	17758	2	1	54	C	
OCT 31,83	OCT 30,83	800 830	****	1	1.8	1	17760	2	1	111	C	
NOV 2,83	NOV 1,83	900 900	1830 2000	1	6.4	1	17762	2	1	99	J	
NOV 3,83	NOV 2,83	900 1100	1130 2000	1	17.1	1	17764	2	1	91	N	
NOV 11,83	NOV 10,83	800 900	****	1	6.2	1	17767	2	1	99	N	
NOV 12,83	NOV 11,83	900 900	900 1300	3	****	1	17769	2	1	55	HCM	
NOV 16,83	NOV 15,83	800 900	1800 2330	3	5.4	1	17774	2	1	62	JHM	
NOV 17,83	NOV 16,83	900 900	****	1	****	1	17771	2	1	****	J	
NOV 20,83	NOV 19,83	800 900	****	1	7.2	1	17776	2	1	****	J	
NOV 21,83	NOV 20,83	900 1000	****	1	4.8	2	17778	2	1	22	N	
NOV 23,83	NOV 22,83	900 900	****	1	9.4	2	17780	2	1	112	J	
NOV 28,83	NOV 27,83	800 900	1830 900	1	13.0	2	17784	2	1	71	JM	
NOV 29,83	NOV 28,83	900 1115	****	3	0.6	2	17786	2	1	96	J	
NOV 30,83	NOV 29,83	1115 900	1100 900	4	1.0	2	17789	2	1	26	N	
DEC 4,83	DEC 3,83	900 900	400 900	4	27.0	2	17791	2	1	168	NHM	
DEC 5,83	DEC 4,83	900 1130	2000 1130	3	25.8	2	17793	2	1	136	N	
DEC 6,83	DEC 5,83	1130 900	1130 900	3	2.8	2	17795	2	1	69		
DEC 9,83	DEC 8,83	800 800	1700 800	3	1.2	2	17799	2	1	101	EIK	
DEC 10,83	DEC 9,83	800 900	****	2	14.8	2	17801	2	1	****		
DEC 12,83	DEC 11,83	1000 900	1400 900	1	0.2	2	17803	2	1	67		
DEC 13,83	DEC 12,83	900 900	****	1	****	2	17805	2	1	94	N	
DEC 15,83	DEC 14,83	900 800	****	1	0.6	2	17807	2	1	249	CD	
DEC 19,83	DEC 18,83	900 900	****	1	22.0	2	17811	2	1	****		
DEC 22,83	DEC 21,83	900 900	1030 530	3		2	17813	2	1	****	EIK	
							17815	2	1	73		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM				802	PAGE : 8			
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 26,83	SEP 25,83	24.0	*****	*****		0.0572	7.70	0.89
OCT 4,83	OCT 3,83	17.0	*****	*****	U	0.0158	*****	*****
OCT 5,83	OCT 4,83	268.0	21.8	4.15	4.39	0.0560	2.75	0.50
OCT 6,83	OCT 5,83	55.0	*****	*****	4.48	0.0500	1.50	0.35
OCT 9,83	OCT 8,83	534.0	18.6	4.22	4.56	0.0448	3.20	0.35
OCT 12,83	OCT 11,83	479.0	12.8	4.34	4.68	0.0406	1.20	0.21
OCT 13,83	OCT 12,83	142.0	37.0	*****	4.76	0.1038		D
OCT 14,83	OCT 13,83	294.0	26.5	3.98	4.16	0.0742	3.45	0.46
OCT 17,83	OCT 16,83	47.0	*****	*****	4.34	0.1568	2.80	0.32
OCT 23,83	OCT 22,83	1264.0	18.1	3.34	4.01	0.0578	8.65	0.85
OCT 24,83	OCT 23,83	10.0	*****	*****	4.34	*****	1.85	0.28
OCT 26,83	OCT 25,83	42.0	41.5	*****	*****	0.0934	*****	*****
OCT 27,83	OCT 26,83	28.0	*****	*****	4.25	0.0180	*****	*****
OCT 31,83	OCT 30,83	129.0	5.5	*****	U	0.0140	0.65	0.05
NOV 2,83	NOV 1,83	268.0	27.2	3.62	4.45	0.0722	2.70	0.56
NOV 3,83	NOV 2,83	374.0	38.0	3.69	4.19	0.1002	3.30	0.63
NOV 11,83	NOV 10,83	1089.0	18.5	3.80	4.52	0.0484	1.90	0.25
NOV 12,83	NOV 11,83	222.0	5.0	5.31	U	0.0142	0.65	0.02
NOV 16,83	NOV 15,83	423.0	19.6	2.54	4.39	0.0610	0.90	0.60
NOV 17,83	NOV 16,83	216.0	22.5	3.56	4.37	0.0646	1.95	0.42
NOV 20,83	NOV 19,83	422.0	37.1	3.29	4.16	0.0976	3.50	0.70
NOV 21,83	NOV 20,83	103.0	38.2	*****	4.25	0.0752	4.35	0.45
NOV 23,83	NOV 22,83	346.0	42.4	3.23	4.10	0.1094	4.45	0.44
NOV 28,83	NOV 27,83	430.0	13.5	3.18	4.64	0.0408	1.30	0.18
NOV 29,83	NOV 28,83	802.0	26.8	2.98	4.31	0.0726	2.60	0.36
NOV 30,83	NOV 29,83	10.0	*****	*****	*****	*****	*****	*****
DEC 4,83	DEC 3,83	108.0	9.6	*****	U	0.0106	2.15	0.20
DEC 5,83	DEC 4,83	70.0	*****	*****	4.38	0.0776	6.95	1.46
DEC 6,83	DEC 5,83	1198.0	16.0	4.42	4.54	0.0464	1.55	0.19
DEC 7,83	DEC 6,83	1686.0	21.9	*****	4.35	0.0638	2.35	0.16
DEC 9,83	DEC 8,83	*****	*****	*****	*****	*****	*****	*****
DEC 10,83	DEC 9,83	52.0	*****	*****	4.78	0.0366	1.55	0.36
DEC 12,83	DEC 11,83	900.0	27.5	*****	4.27	0.0762	2.25	0.49
DEC 13,83	DEC 12,83	32.0	*****	*****	4.04	0.1324	*****	*****
DEC 15,83	DEC 14,83	79.0	*****	*****	4.03	0.1212	5.15	0.98
DEC 19,83	DEC 18,83	*****	*****	*****	*****	*****	*****	*****
DEC 22,83	DEC 21,83	1032.0	26.3	*****	4.30	0.0710	2.60	0.37

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM				#02	PAGE : 9			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 26,83	SEP 25,83	*****	0.26	*****	*****	*****	*****	0.0537
OCT 4,83	OCT 3,83	*****	*****	*****	*****	*****	*****	U 0.0000
OCT 5,83	OCT 4,83	0.42	0.07	0.055	0.045	0.015	0.540	0.0331
OCT 6,83	OCT 5,83	*****	0.05	*****	*****	*****	*****	0.0275
OCT 9,83	OCT 8,83	0.71	0.06	0.055	0.060	<T	0.460	0.0209
OCT 12,83	OCT 11,83	D	0.07	D	0.025	0.025	0.114	0.0174
OCT 13,83	OCT 12,83	0.20	0.38	0.030	0.025	0.045	0.222	0.0692
OCT 14,83	OCT 13,83	0.27	0.26	0.050	0.050	0.020	0.278	0.0457
OCT 17,83	OCT 16,83	*****	0.35	*****	*****	*****	*****	0.0977
OCT 23,83	OCT 22,83	0.08	0.09	0.020	0.035	0.065	0.108	0.0457
OCT 24,83	OCT 23,83	*****	*****	*****	*****	*****	*****	*****
OCT 26,83	OCT 25,83	*****	*****	*****	*****	*****	*****	0.0562
OCT 27,83	OCT 26,83	*****	*****	*****	*****	*****	*****	U 0.0001
OCT 31,83	OCT 30,83	0.24	0.13	0.040	0.065	0.040	0.112	0.0355
NOV 2,83	NOV 1,83	0.32	0.17	0.045	0.075	0.070	0.154	0.0646
NOV 3,83	NOV 2,83	0.17	0.32	0.040	0.035	0.170	0.170	0.0302
NOV 11,83	NOV 10,83	0.12	0.13	0.015	0.030	<T	0.194	U 0.0000
NOV 12,83	NOV 11,83	0.52	0.08	0.110	0.035	0.040	0.068	0.0407
NOV 16,83	NOV 15,83	0.12	0.07	0.010	0.035	0.015	0.104	0.0627
NOV 17,83	NOV 16,83	0.12	0.08	0.015	0.030	0.025	0.162	0.0692
NOV 20,83	NOV 19,83	0.31	0.30	0.035	0.070	0.150	0.318	0.0562
NOV 21,83	NOV 20,83	0.41	0.47	0.090	0.085	*****	0.284	0.0794
NOV 23,83	NOV 22,83	0.25	0.40	0.030	0.040	0.205	0.258	0.0229
NOV 28,83	NOV 27,83	0.12	0.12	0.015	<T	0.010	0.058	0.0490
NOV 29,83	NOV 28,83	0.11	0.19	0.020	0.020	0.020	0.258	*****
NOV 30,83	NOV 29,83	*****	*****	*****	*****	*****	*****	U 0.0000
DEC 4,83	DEC 3,83	U 1.12	0.14	U 0.215	0.035	0.050	0.026	0.0417
DEC 5,83	DEC 4,83	*****	0.91	*****	*****	*****	*****	0.0288
DEC 6,83	DEC 5,83	0.11	0.05	0.015	<T	0.015	0.048	0.0447
DEC 7,83	DEC 6,83	0.05	0.05	0.010	<T	0.005	0.078	*****
DEC 9,83	DEC 8,83	*****	*****	*****	*****	*****	*****	0.0166
DEC 10,83	DEC 9,83	*****	0.31	*****	*****	*****	*****	0.0537
DEC 12,83	DEC 11,83	0.12	0.11	0.015	<T	0.040	0.116	0.0912
DEC 13,83	DEC 12,83	*****	*****	*****	*****	*****	*****	0.0933
DEC 15,83	DEC 14,83	*****	0.39	*****	*****	*****	0.520	*****
DEC 19,83	DEC 18,83	*****	*****	*****	*****	*****	*****	*****
DEC 22,83	DEC 21,83	0.17	0.09	0.035	<T	0.015	0.108	0.0501

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
JAN 7,83	JAN 6,83	800 800	800 800	1	1.7	2	18186	2	1	130	CD M
JAN 10,83	JAN 9,83	800 800	800 800	1	15.5	2	18187	2	1	93	
JAN 12,83	JAN 11,83	800 800	800 800	3	2.4	2	18188	2	1	81	
JAN 15,83	JAN 14,83	800 800	800 800	2	4.8	2	18189	2	1	****	EFIK
JAN 18,83	JAN 17,83	800 800	800 800	2	****	2	18190	2	1	****	
JAN 19,83	JAN 18,83	800 800	800 800	2	2.6	2	18191	2	1	****	EK
JAN 23,83	JAN 22,83	800 900	800 800	1	2.1	2	18192	2	1	95	
JAN 25,83	JAN 24,83	800 800	800 800	1	1.0	2	18193	2	1	59	
JAN 31,83	JAN 30,83	800 800	800 800	3	4.3	2	18194	2	1	105	
FEB 2,83	FEB 1,83	800 800	800 800	1	3.7	2	18195	2	1	75	C
FEB 3,83	FEB 2,83	800 800	800 800	2	5.5	2	18196	2	1	115	
FEB 17,83	FEB 16,83	800 800	800 800	1	1.0	2	18197	2	1	118	C
FEB 23,83	FEB 22,83	800 800	800 800	1	6.2	2	18198	2	1	126	
MAR 7,83	MAR 6,83	800 800	800 800	1	1.7	2	18199	2	1	146	N
MAR 8,83	MAR 7,83	800 800	800 800	1	2.3	2	18200	2	1	114	N
MAR 9,83	MAR 8,83	800 800	800 800	1	3.6	2	18201	2	1	114	C
MAR 19,83	MAR 18,83	800 800	800 800	1	16.6	2	18202	2	1	85	CD
MAR 27,83	MAR 26,83	800 930	800 800	3	6.7	2	18203	2	1	66	
APR 3,83	APR 2,83	800 1000	800 1000	1	2.6	2	18204	2	1	150	C
APR 5,83	APR 3,83	1000 1445	800 800	1	****	2	18205	2	1	****	N Y2
APR 7,83	APR 6,83	800 800	800 800	1	11.1	2	18206	2	1	88	A
APR 8,83	APR 7,83	800 800	800 800	1	****	2	18207	2	1	****	C
APR 10,83	APR 9,83	800 800	800 800	1	36.1	2	18208	2	1	99	C
APR 11,83	APR 10,83	800 800	800 800	1	1.1	2	18209	2	1	58	C
APR 12,83	APR 11,83	800 800	800 800	1	1.2	2	18210	2	1	132	CD
APR 14,83	APR 13,83	800 800	800 800	1	9.6	1	18211	2	1	99	C
APR 15,83	APR 14,83	800 800	800 800	1	14.4	1	18212	2	1	93	C
APR 17,83	APR 16,83	800 1000	800 1000	2	4.6	2	18213	2	1	18	N
APR 18,83	APR 17,83	1000 800	800 800	2	1.8	2	18214	2	1	****	HL
APR 29,83	APR 28,83	800 800	800 800	1	13.2	1	18215	2	1	93	EFIK
MAY 1,83	APR 30,83	800 900	900 1600	1	17.2	1	18216	2	1	98	H
MAY 2,83	MAY 1,83	900 800	800 800	1	22.3	1	18217	2	1	92	
MAY 3,83	MAY 2,83	800 800	800 800	1	****	1	18218	2	1	****	C
MAY 4,83	MAY 3,83	800 800	800 800	1	7.5	1	18219	2	1	99	
MAY 5,83	MAY 4,83	800 800	800 800	1	1.9	1	18220	2	1	86	C
MAY 8,83	MAY 7,83	800 800	800 800	1	12.2	1	18221	2	1	103	C
MAY 15,83	MAY 14,83	800 800	800 800	1	12.0	1	18222	2	1	97	
MAY 20,83	MAY 19,83	800 800	800 800	1	22.0	1	18223	2	1	138	N
MAY 22,83	MAY 21,83	800 800	800 800	1	1.0	1	18224	2	1	81	C
MAY 23,83	MAY 22,83	800 800	800 800	1	11.4	1	18225	2	1	89	C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7.83	JAN 6.83	142.0	58.5	*****	4.04	0.1258	5.25	2.05
JAN 10.83	JAN 9.83	925.0	30.0	4.27	*****	*****	2.15	0.28
JAN 12.83	JAN 11.83	126.0	*****	*****	4.37	0.0820	3.00	0.73
JAN 15.83	JAN 14.83	*****	*****	*****	*****	*****	*****	*****
JAN 18.83	JAN 17.83	203.0	G 106.0	3.65	3.74	G 0.2400	7.40	1.77
JAN 19.83	JAN 18.83	*****	*****	*****	*****	*****	*****	*****
JAN 23.83	JAN 22.83	128.0	48.0	*****	4.21	0.1466	4.05	0.84
JAN 25.83	JAN 24.83	38.0	*****	*****	3.65	G 0.3080	*****	*****
JAN 31.83	JAN 30.83	292.0	42.3	4.07	4.06	0.1286	4.00	0.67
FEB 2.83	FEB 1.83	179.0	30.4	4.44	4.29	0.0942	4.15	0.40
FEB 3.83	FEB 2.83	407.0	43.7	4.09	4.02	0.1336	3.35	0.70
FEB 17.83	FEB 16.83	76.0	*****	*****	U 3.37	G 0.5580	U 11.85	U 5.40
FEB 23.83	FEB 22.83	502.0	G 110.0	*****	3.61	G 0.2920	8.50	1.53
MAR 7.83	MAR 6.83	160.0	30.0	*****	4.26	0.0664	2.70	0.38
MAR 8.83	MAR 7.83	169.0	46.6	*****	4.23	0.0916	5.25	1.37
MAR 9.83	MAR 8.83	265.0	55.8	*****	4.02	0.1406	4.20	1.12
MAR 19.83	MAR 18.83	908.0	24.4	*****	4.35	D 0.0700	1.80	0.38
MAR 27.83	MAR 26.83	285.0	26.8	*****	4.31	0.0732	1.95	0.40
APR 3.83	APR 2.83	251.0	52.1	4.26	4.22	0.1108	6.85	1.11
APR 5.83	APR 3.83	75.0	*****	*****	4.10	0.1114	3.05	0.71
APR 7.83	APR 6.83	630.0	60.3	4.09	3.95	0.1414	5.05	0.98
APR 8.83	APR 7.83	11.0	*****	*****	*****	*****	*****	*****
APR 10.83	APR 9.83	2296.0	A 20.0	4.71	4.44	0.0572	1.70	0.27
APR 11.83	APR 10.83	41.0	*****	*****	G 5.29	*****	5.25	1.03
APR 12.83	APR 11.83	102.0	*****	*****	4.16	0.1104	5.55	0.82
APR 14.83	APR 13.83	615.0	50.2	4.09	4.08	0.1264	4.25	0.71
APR 15.83	APR 14.83	865.0	28.6	4.41	4.39	0.0724	2.80	0.34
APR 17.83	APR 16.83	54.0	*****	*****	*****	*****	1.50	1.45
APR 18.83	APR 17.83	*****	*****	*****	*****	*****	*****	*****
APR 29.83	APR 28.83	789.0	23.0	4.60	4.97	0.0386	4.20	0.50
MAY 1.83	APR 30.83	1081.0	26.0	4.25	4.36	0.0690	2.25	0.34
MAY 2.83	MAY 1.83	1321.0	25.4	4.23	4.40	0.0648	2.65	0.24
MAY 3.83	MAY 2.83	616.0	20.4	4.55	4.85	0.0384	3.00	0.35
MAY 4.83	MAY 3.83	479.0	29.9	4.17	4.25	0.0798	3.45	0.19
MAY 5.83	MAY 4.83	105.0	*****	*****	U 4.90	0.0498	5.25	2.10
MAY 8.83	MAY 7.83	806.0	23.4	4.41	4.70	0.0448	4.00	0.39
MAY 15.83	MAY 14.83	753.0	13.3	4.65	4.79	0.1272	1.45	0.11
MAY 20.83	MAY 19.83	1947.0	28.6	4.17	4.33	0.0768	2.85	0.14
MAY 22.83	MAY 21.83	52.0	*****	*****	U 3.44	G 0.4960	U 12.30	U 2.45
MAY 23.83	MAY 22.83	655.0	32.9	4.13	4.27	0.0826	3.30	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEN #01

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 7,83	JAN 6,83	1.04	0.57	0.130	0.075	0.305	U 1.420	0.0912
JAN 10,83	JAN 9,83	G 1.52	0.13	0.225	0.125	0.110	U 0.206	*****
JAN 12,83	JAN 11,83	0.06	0.48	0.005	0.045	<M 0.005	0.940	0.0427
JAN 15,83	JAN 14,83	*****	*****	*****	*****	*****	*****	*****
JAN 18,83	JAN 17,83	0.92	G 1.05	0.115	0.095	0.370	G 1.230	0.1820
JAN 19,83	JAN 18,83	*****	*****	*****	*****	*****	*****	*****
JAN 23,83	JAN 22,83	0.59	0.51	0.060	G 0.300	0.280	0.228	0.0617
JAN 25,83	JAN 24,83	*****	*****	*****	*****	*****	*****	0.2239
JAN 31,83	JAN 30,83	0.14	0.24	0.035	0.065	0.065	0.690	0.0871
FEB 2,83	FEB 1,83	0.21	0.27	0.050	0.180	0.145	*****	0.0513
FEB 3,83	FEB 2,83	0.17	0.36	0.045	0.060	0.095	0.276	0.0955
FEB 17,83	FEB 16,83	*****	U 2.30	*****	*****	*****	*****	U 0.4266
FEB 23,83	FEB 22,83	0.31	0.79	0.055	0.060	0.240	0.730	0.2455
MAR 7,83	MAR 6,83	0.60	0.53	0.090	0.075	0.255	0.072	0.0550
MAR 8,83	MAR 7,83	1.90	0.69	0.220	U 0.365	0.330	0.750	0.0589
MAR 9,83	MAR 8,83	0.42	0.30	0.050	0.080	0.120	0.520	0.0955
MAR 19,83	MAR 18,83	0.09	0.07	0.015	0.015	0.025	0.162	0.0447
MAR 27,83	MAR 26,83	0.13	0.11	0.025	0.040	0.065	0.198	0.0490
APR 3,83	APR 2,83	0.13	0.45	0.320	0.140	0.160	0.630	0.0603
APR 5,83	APR 3,83	1.69	0.14	0.020	0.050	0.050	*****	0.0794
APR 7,83	APR 6,83	0.12	0.26	0.050	0.070	0.080	0.430	0.1122
APR 8,83	APR 7,83	0.47	*****	*****	*****	*****	*****	*****
APR 10,83	APR 9,83	0.14	0.06	0.010	0.040	0.030	0.072	0.0363
APR 11,83	APR 10,83	*****	0.35	*****	*****	*****	*****	G 0.0051
APR 12,83	APR 11,83	0.39	0.98	0.060	U 0.505	0.660	0.810	0.0692
APR 14,83	APR 13,83	0.36	0.22	0.040	0.070	0.045	0.248	0.0832
APR 15,83	APR 14,83	0.31	0.20	0.045	0.060	0.080	0.194	0.0407
APR 17,83	APR 16,83	0.25	0.34	0.035	0.055	0.040	*****	*****
APR 18,83	APR 17,83	*****	*****	*****	*****	*****	*****	*****
APR 29,83	APR 28,83	1.00	0.16	0.195	0.080	0.105	0.780	0.0107
MAY 1,83	APR 30,83	0.07	0.06	0.025	0.015	0.030	0.284	0.0437
MAY 2,83	MAY 1,83	0.12	0.05	0.030	0.040	0.060	0.272	0.0398
MAY 3,83	MAY 2,83	0.63	0.22	0.110	D 0.085	0.210	0.460	0.0141
MAY 4,83	MAY 3,83	0.25	0.15	0.035	0.080	0.150	0.152	0.0562
MAY 5,83	MAY 4,83	1.95	0.44	0.405	0.195	0.175	1.600	0.0126
MAY 8,83	MAY 7,83	0.98	0.27	0.150	0.110	0.240	0.440	0.0200
MAY 15,83	MAY 14,83	0.05	0.05	0.035	0.020	0.035	0.214	0.0162
MAY 20,83	MAY 19,83	0.10	0.06	0.020	0.025	0.030	0.184	0.0468
MAY 22,83	MAY 21,83	*****	U 1.28	*****	*****	*****	*****	U 0.3631
MAY 23,83	MAY 22,83	0.14	0.11	0.030	0.040	0.050	0.304	0.0537

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM

#01

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(HH)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-HOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES	(%)	
				03-COMP/04-OTHER							
MAY 24,83	MAY 23,83	800 800	800 800	1	0.6	1	18226	2	1	****	E
MAY 26,83	MAY 25,83	800 800	800 800	1	4.5	1	18227	2	1	90	ACD
MAY 30,83	MAY 29,83	800 800	1000 1500	1	14.8	1	18228	2	1	103	C
JUN 1,83	MAY 31,83	800 800	800 800	1	10.4	1	18229	2	1	100	AD
JUN 4,83	JUN 3,83	800 800	800 800	1	11.2	1	18230	2	1	95	
JUN 6,83	JUN 5,83	800 800	800 800	1	6.0	1	18231	2	1	103	CD
JUN 7,83	JUN 6,83	800 800	800 800	1	3.6	1	18232	2	1	82	H
JUN 10,83	JUN 9,83	800 800	800 800	1	3.0	1	18233	2	1	94	HM
JUN 28,83	JUN 27,83	800 900	800 900	1	22.2	1	18235	2	1	142	C
JUN 29,83	JUN 28,83	900 800	800 800	1	1.6	1	18236	2	1	48	N
JUL 1,83	JUN 30,83	800 800	800 800	1	3.4	1	18237	2	1	92	
JUL 5,83	JUL 4,83	800 900	800 900	1	22.0	1	18238	2	1	124	DF
JUL 18,83	JUL 17,83	800 900	1300 1900	1	37.4	1	18239	2	1	91	C
JUL 20,83	JUL 19,83	800 800	800 800	1	0.6	1	18240	2	1	36	N
JUL 21,83	JUL 20,83	800 800	800 800	1	5.0	1	18241	2	1	91	BC
JUL 24,83	JUL 23,83	800 800	800 800	1	1.2	1	18242	2	1	70	J
JUL 29,83	JUL 28,83	800 1200	400 1200	1	33.0	1	18243	2	1	103	
JUL 30,83	JUL 29,83	1200 900	800 900	1	14.8	1	18244	2	1	98	C
JUL 31,83	JUL 30,83	900 1300	800 1300	1	21.5	1	18245	2	1	98	
AUG 1,83	JUL 31,83	1300 800	800 800	1	5.8	1	18246	2	1	91	BC
AUG 2,83	AUG 1,83	800 800	800 800	1	0.6	1	18247	2	1	20	E
AUG 4,83	AUG 3,83	800 800	800 800	1	22.2	1	18248	2	1	186	P
AUG 9,83	AUG 8,83	800 800	800 800	1	20.0	1	18249	2	1	102	BC
AUG 11,83	AUG 10,83	800 800	800 800	3	12.0	1	18250	2	1	96	
AUG 16,83	AUG 15,83	800 800	1100 1400	1	21.3	1	18251	2	1	116	
AUG 22,83	AUG 21,83	800 800	1200 1600	1	2.6	1	18252	2	1	80	Y5
AUG 23,83	AUG 22,83	800 800	800 800	1	0.4	1	18253	2	1	****	
AUG 26,83	AUG 25,83	800 800	800 800	1	0.6	1	18254	2	1	****	E
AUG 31,83	AUG 30,83	800 800	800 800	1	29.0	1	18255	2	1	****	E
SEP 7,83	SEP 6,83	800 800	800 800	1	1.7	1	18256	2	1	102	J
SEP 16,83	SEP 15,83	800 800	800 800	1	11.2	1	18257	2	1	45	N
SEP 17,83	SEP 16,83	800 800	800 800	1	17.9	1	18258	2	1	94	T
SEP 19,83	SEP 18,83	800 800	800 800	1	1.0	1	18259	2	1	96	
SEP 21,83	SEP 20,83	800 800	1900 600	1	****	1	18260	2	1	46	N
OCT 5,83	OCT 4,83	800 800	800 800	1	2.4	1	18261	2	1	****	
OCT 6,83	OCT 5,83	800 800	800 800	1	4.8	1	18262	2	1	53	
OCT 9,83	OCT 8,83	800 800	800 800	1	5.0	1	18263	2	1	87	
OCT 12,83	OCT 11,83	800 800	800 800	1	9.0	1	18264	2	1	97	
OCT 13,83	OCT 12,83	800 800	800 800	1	5.2	1	18265	2	1	100	
OCT 14,83	OCT 13,83	800 800	800 800	1	2.8	1	18266	2	1	93	
				1		1	18267	2	1	96	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01										PAGE : 5	
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMH/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 NG/L	SULPHATE HG/L	NITRATE AS N HG/L			
MAY 24,83	MAY 23,83	*****	*****	*****	*****	*****	*****	*****			
MAY 26,83	MAY 25,83	261.0	35.5	4.07	4.26	0.0928	3.65	0.53			
MAY 30,83	MAY 29,83	986.0	36.5	4.06	4.19	0.1006	3.45	0.36			
JUN 1,83	MAY 31,83	672.0	24.4	4.28	4.51	0.0614	3.15	0.35			
JUN 4,83	JUN 3,83	687.0	66.5	3.73	3.90	0.1696	5.45	0.86			
JUN 6,83	JUN 5,83	398.0	19.8	4.26	4.67	0.0482	2.35	0.31			
JUN 7,83	JUN 6,83	191.0	6.2	4.79	G 5.26	0.0256	0.70	0.10			
JUN 10,83	JUN 9,83	181.0	*****	3.81	4.04	0.1400	8.60	1.42			
JUN 26,83	JUN 27,83	2022.0	*****	3.93	4.13	0.1218	6.80	1.45			
JUN 29,83	JUN 28,83	50.0	*****	*****	*****	*****	*****	*****			
JUL 1,83	JUN 30,83	201.0	71.0	3.74	3.89	0.1822	7.15	0.66			
JUL 5,83	JUL 4,83	1758.0	12.9	4.68	4.82	0.0336	1.50	0.14			
JUL 18,83	JUL 17,83	2200.0	19.0	4.69	4.87	0.0366	3.15	0.41			
JUL 20,83	JUL 19,83	14.0	*****	*****	*****	*****	*****	*****			
JUL 21,83	JUL 20,83	293.0	11.9	5.20	U 6.33	0.0190	1.70	0.49			
JUL 24,83	JUL 23,83	54.0	*****	*****	4.37	0.0824	5.20	1.06			
JUL 29,83	JUL 28,83	2192.0	33.4	4.16	4.26	0.0774	3.60	0.47			
JUL 30,83	JUL 29,83	934.0	80.0	3.74	U 3.84	0.1926	9.95	1.02			
JUL 31,83	JUL 30,83	1351.0	27.4	4.20	4.38	0.0698	2.90	0.25			
AUG 1,83	JUL 31,83	340.0	38.4	4.18	4.28	0.0840	5.00	0.54			
AUG 2,83	AUG 1,83	8.0	*****	*****	*****	*****	*****	*****			
AUG 4,83	AUG 3,83	2651.0	62.0	*****	D 3.99	0.1422	6.15	0.73			
AUG 9,83	AUG 8,83	1316.0	15.5	4.72	U 5.36	0.0268	3.00	0.32			
AUG 11,83	AUG 10,83	741.0	*****	3.89	4.00	0.1310	6.05	0.62			
AUG 16,83	AUG 15,83	1596.0	29.4	4.01	4.40	0.0738	3.35	0.23			
AUG 22,83	AUG 21,83	134.0	57.0	*****	4.04	0.1328	7.30	1.14			
AUG 23,83	AUG 22,83	*****	*****	*****	*****	*****	*****	*****			
AUG 26,83	AUG 25,83	*****	*****	*****	*****	*****	*****	*****			
AUG 31,83	AUG 30,83	1912.0	36.0	3.70	4.31	0.0852	4.10	0.47			
SEP 7,83	SEP 6,83	50.0	*****	*****	U 3.81	0.2240	14.20	1.37			
SEP 16,83	SEP 15,83	676.0	50.5	3.69	4.02	0.0946	3.35	0.82			
SEP 17,83	SEP 16,83	1112.0	40.6	3.81	4.18	0.0674	4.20	0.35			
SEP 19,83	SEP 18,83	30.0	*****	*****	4.24	0.0598	4.95	0.71			
SEP 21,83	SEP 20,83	1895.0	11.3	4.34	4.74	0.0318	1.05	0.10			
OCT 5,83	OCT 4,83	82.0	33.4	*****	U 5.12	0.0376	6.50	1.36			
OCT 6,83	OCT 5,83	269.0	16.3	4.29	4.47	0.0492	1.40	0.35			
OCT 9,83	OCT 8,83	314.0	17.5	4.34	4.72	0.0412	2.85	0.31			
OCT 12,83	OCT 11,83	578.0	13.2	4.31	4.60	0.0428	1.00	0.23			
OCT 13,83	OCT 12,83	313.0	21.2	3.95	4.40	0.0660	1.80	0.26			
OCT 14,83	OCT 13,83	174.0	23.6	*****	4.36	0.0670	2.65	0.32			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM				#01	PAGE : 6			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE NH4 LAB MG/L
MAY 24,83	MAY 23,83	*****	*****	*****	*****	*****	*****	*****
MAY 26,83	MAY 25,83	0.42	0.20	0.075	0.045	0.050	0.420	0.0550
MAY 30,83	MAY 29,83	0.15	0.12	0.035	0.035	0.035	0.320	0.0646
MAY 31,83	MAY 31,83	0.32	0.25	0.060	0.070	0.035	0.550	0.0309
JUN 1,83	JUN 3,83	0.24	0.25	0.050	0.015	0.040	0.266	0.1259
JUN 4,83	JUN 5,83	0.23	0.10	0.040	0.045	0.050	0.430	0.0214
JUN 6,83	JUN 5,83	0.23	0.08	0.040	0.040	0.050	0.102	G 0.0055
JUN 7,83	JUN 6,83	0.19	0.08	0.040	0.040	0.050	0.0912	0.0741
JUN 10,83	JUN 9,83	1.44	0.40	0.265	0.080	0.100	0.116	0.0741
JUN 20,83	JUN 27,83	*****	0.20	*****	*****	*****	0.880	0.0741
JUN 28,83	JUN 28,83	*****	0.27	*****	*****	*****	*****	*****
JUN 29,83	JUN 28,83	0.36	0.18	0.050	0.065	0.100	0.390	0.1288
JUL 1,83	JUN 30,83	0.14	0.16	0.030	0.065	0.090	0.190	0.0151
JUL 5,83	JUL 4,83	0.70	0.16	0.135	0.055	0.055	0.550	0.0135
JUL 18,83	JUL 17,83	*****	*****	*****	*****	*****	*****	*****
JUL 20,83	JUL 19,83	0.66	0.19	0.110	0.125	0.125	0.550	U 0.0005
JUL 21,83	JUL 20,83	*****	0.65	*****	*****	*****	*****	0.0427
JUL 24,83	JUL 23,83	0.42	0.17	0.080	0.030	0.070	0.276	0.0550
JUL 29,83	JUL 28,83	0.94	0.37	0.155	0.065	0.155	0.950	U 0.1445
JUL 30,83	JUL 29,83	0.10	0.10	0.025	0.040	0.040	0.222	0.0417
JUL 31,83	JUL 30,83	0.33	0.14	0.075	0.100	0.055	0.900	0.0525
AUG 1,83	JUL 31,83	*****	*****	*****	*****	*****	*****	*****
AUG 2,83	AUG 1,83	0.35	0.19	0.080	0.035	0.040	0.570	D 0.1023
AUG 4,83	AUG 3,83	0.75	0.21	0.165	0.075	0.055	0.430	U 0.0044
AUG 9,83	AUG 8,83	0.27	0.20	0.050	0.065	0.055	0.740	0.1000
AUG 11,83	AUG 10,83	0.12	0.10	0.020	<W 0.005	<W 0.005	0.400	0.0398
AUG 16,83	AUG 11,83	1.17	0.31	0.190	0.060	D 0.135	0.332	0.0912
AUG 22,83	AUG 21,83	*****	*****	*****	*****	*****	*****	*****
AUG 23,83	AUG 22,83	0.20	0.14	0.030	0.070	0.065	0.520	0.0490
AUG 26,83	AUG 25,83	0.28	0.21	0.030	0.055	0.035	0.950	U 0.1549
SEP 7,83	SEP 6,83	0.16	0.12	0.015	0.035	0.035	0.146	0.0955
SEP 16,83	SEP 15,83	0.28	0.24	0.015	0.035	0.035	0.490	0.0661
SEP 17,83	SEP 16,83	0.16	0.12	0.015	0.035	0.035	0.490	0.0661
SEP 19,83	SEP 18,83	0.15	0.02	0.020	0.010	0.005	0.084	0.0575
SEP 21,83	SEP 20,83	0.15	0.02	0.020	<T 0.010	<W 0.005	0.084	0.0182
OCT 5,83	OCT 4,83	0.17	0.31	0.500	0.200	0.130	0.272	U 0.0076
OCT 6,83	OCT 5,83	0.51	0.04	0.015	0.020	<T 0.010	0.520	0.0339
OCT 9,83	OCT 8,83	0.10	0.04	0.035	0.060	<T 0.010	0.110	0.0191
OCT 12,83	OCT 11,83	0.09	<W 0.01	0.010	<T 0.005	0.015	0.124	0.0251
OCT 13,83	OCT 12,83	0.35	0.08	0.010	0.020	0.030	0.180	0.0398
OCT 14,83	OCT 13,83	0.35	0.13	0.035	0.060	0.025	0.180	0.0437

APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

#01

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		FIELD OFFICE
OCT 17,63	OCT 16,63	800 800	8000 8000	1	0.6	1	16260	2	1	13	CDE N
OCT 23,63	OCT 22,63	800 900	1000 600	1	29.1	1	18269	2	1	89	J
OCT 26,63	OCT 25,63	800 800	8000 8000	1	0.6	1	18270	2	1	64	CD
OCT 29,63	OCT 28,63	800 800	500 600	1	1.0	1	18271	2	1	42	N
NOV 2,63	NOV 1,63	800 800	1600 2200	1	3.9	1	18272	2	1	88	JM
NOV 3,63	NOV 2,63	800 800	8000 8000	1	5.3	1	18273	2	1	93	J
NOV 11,63	NOV 10,63	800 800	8000 8000	1	12.0	1	18274	2	1	88	C
NOV 12,63	NOV 11,63	800 800	8000 8000	3	6.0	2	18275	2	1	80	J
NOV 16,63	NOV 15,63	800 800	8000 8000	3	12.7	2	18276	2	1	99	JC
NOV 17,63	NOV 16,63	800 800	8000 8000	3	4.3	2	18277	2	1	61	J
NOV 20,63	NOV 19,63	800 800	8000 8000	1	5.2	1	18278	2	1	91	J
NOV 21,63	NOV 20,63	800 800	8000 8000	1	4.0	1	18279	2	1	84	J
NOV 23,63	NOV 22,63	800 800	8000 8000	1	4.6	1	18280	2	1	86	J
NOV 24,63	NOV 23,63	800 800	8000 8000	1	5.3	2	18281	2	1	73	C
NOV 26,63	NOV 25,63	800 800	8000 8000	1	12.3	2	18283	2	1	81	J
NOV 29,63	NOV 28,63	800 800	1600 1800	1	9.8	2	18284	2	1	85	J
DEC 6,63	DEC 5,63	800 800	1000 800	2	22.0	2	18285	2	1	107	C
DEC 7,63	DEC 6,63	800 800	8000 8000	3	24.0	2	18286	2	1	108	C
DEC 8,63	DEC 7,63	800 800	8000 8000	2	0.8	2	18287	2	1	48	C
DEC 10,63	DEC 9,63	800 900	8000 8000	2	4.2	2	18288	2	1	76	CD
DEC 12,63	DEC 11,63	800 800	8000 8000	1	19.8	2	18289	2	1	86	C
DEC 13,63	DEC 12,63	800 800	8000 8000	1	1.9	2	18290	2	1	94	C
DEC 15,63	DEC 14,63	800 800	8000 8000	1	1.7	2	18291	2	1	74	G
DEC 22,63	DEC 21,63	800 800	8000 8000	3	25.4	2	18292	2	1	80	U
DEC 28,63	DEC 27,63	800 1350	8000 8000	2	8.9	2	18293	2	1	88	EIK

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : MELBOURNE/DAILY/AEROCHEM #01									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
OCT 17,83	OCT 16,83	7.0	*****	*****	*****	*****	*****	*****	
OCT 23,83	OCT 22,83	1666.0	18.1	3.30	4.45	G 0.4780	2.00	0.30	
OCT 26,83	OCT 25,83	33.0	*****	*****	U 3.98	0.1764	U 10.60	U 1.38	
OCT 29,83	OCT 28,83	27.0	*****	*****	U 7.77	0.0152	*****	*****	
NOV 2,83	NOV 1,83	222.0	31.6	U 2.12	4.31	0.0864	3.20	0.60	
NOV 3,83	NOV 2,83	316.0	30.9	3.68	4.25	0.0844	3.00	0.51	
NOV 11,83	NOV 10,83	681.0	19.3	U 2.46	4.54	0.0508	1.75	0.27	
NOV 12,83	NOV 11,83	308.0	5.6	3.72	U 5.69	0.0188	0.60	0.01	<T
NOV 16,83	NOV 15,83	811.0	19.5	U 2.41	4.39	0.0630	0.75	0.58	
NOV 17,83	NOV 16,83	170.0	20.2	*****	4.47	0.0532	1.25	0.48	
NOV 20,83	NOV 19,83	304.0	40.8	U 2.45	4.14	0.1034	3.35	0.86	
NOV 21,83	NOV 20,83	217.0	26.4	U 3.19	4.32	0.0736	2.80	0.23	
NOV 23,83	NOV 22,83	267.0	51.2	U 3.19	4.04	0.1262	5.45	0.61	
NOV 24,83	NOV 23,83	250.0	39.8	U 2.97	4.16	0.0954	3.50	0.51	
NOV 26,83	NOV 25,83	644.0	17.0	U 3.16	4.55	0.0484	1.35	0.20	
NOV 29,83	NOV 28,83	536.0	30.5	U 3.07	4.30	0.0756	2.75	0.37	
DEC 6,83	DEC 5,83	1523.0	20.2	*****	4.43	0.0546	1.85	0.28	
DEC 7,83	DEC 6,83	1663.0	25.3	*****	4.34	0.0696	2.60	0.18	
DEC 8,83	DEC 7,83	25.0	*****	*****	4.63	0.0400	0.45	0.33	
DEC 10,83	DEC 9,83	211.0	18.3	*****	4.73	0.0362	0.85	0.62	
DEC 12,83	DEC 11,83	1103.0	28.8	*****	4.24	0.0762	2.20	0.49	
DEC 13,83	DEC 12,83	115.0	45.5	*****	4.04	0.1178	3.95	0.92	
DEC 15,83	DEC 14,83	81.0	*****	*****	4.01	0.1274	4.85	0.91	
DEC 22,83	DEC 21,83	1307.0	27.0	*****	4.31	0.0688	2.55	0.35	
DEC 26,83	DEC 27,83	*****	*****	*****	*****	*****	*****	*****	

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM				#01	PAGE : 9			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 17,83	OCT 16,83	*****	*****	*****	*****	*****	*****	*****
OCT 23,83	OCT 22,83	0.22	0.32	0.065	0.030	0.060	0.078	0.0355
OCT 26,83	OCT 25,83	*****	U 0.93	*****	*****	*****	*****	U 0.1047
OCT 29,83	OCT 28,83	*****	*****	*****	*****	*****	*****	U 0.0000
NOV 2,83	NOV 1,83	0.33	0.10	0.045	0.040	0.060	0.218	0.0490
NOV 3,83	NOV 2,83	0.18	0.23	0.030	0.045	0.135	0.188	0.0562
NOV 11,83	NOV 10,83	0.11	0.12	0.010	0.020	0.020	0.272	0.0288
NOV 12,83	NOV 11,83	0.12	0.04	0.020	0.055	0.030	0.080	U 0.0020
NOV 16,83	NOV 15,83	0.06	0.05	0.010	<T	0.015	0.088	0.0407
NOV 17,83	NOV 16,83	0.08	0.05	0.010	0.020	0.020	0.264	0.0339
NOV 20,83	NOV 19,83	0.35	0.31	0.010	0.045	0.170	0.344	0.0724
NOV 21,83	NOV 20,83	0.18	0.21	0.025	0.020	0.075	0.114	0.0479
NOV 23,83	NOV 22,83	0.40	0.54	0.065	0.065	0.320	0.364	0.0912
NOV 24,83	NOV 23,83	0.36	0.37	0.030	0.050	0.270	0.120	0.0692
NOV 26,83	NOV 25,83	0.12	0.08	0.010	<T	0.020	0.040	0.0282
NOV 29,83	NOV 28,83	0.14	0.17	0.015	0.035	0.020	0.246	0.0501
DEC 6,83	DEC 5,83	0.05	0.07	0.010	<T	0.010	0.098	0.0372
DEC 7,83	DEC 6,83	0.04	0.05	0.005	<T	0.005	0.072	0.0457
DEC 8,83	DEC 7,83	*****	0.09	*****	*****	*****	*****	0.0234
DEC 10,83	DEC 9,83	*****	0.23	*****	*****	*****	*****	0.0186
DEC 12,83	DEC 11,83	0.06	0.12	0.015	0.020	0.085	0.118	0.0575
DEC 13,83	DEC 12,83	*****	0.16	*****	*****	*****	0.154	0.0912
DEC 15,83	DEC 14,83	*****	0.37	*****	*****	*****	0.430	0.0977
DEC 22,83	DEC 21,83	0.10	0.09	0.025	<T	0.015	0.110	0.0490
DEC 26,83	DEC 27,83	*****	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEN #03										PAGE : 1	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
JAN 7,83	JAN 6,83	800 800	800 800	2	5.7	2	18568	2	1	37	C N
JAN 8,83	JAN 7,83	800 800	800 800	2	***	2	18569	2	1	***	
JAN 11,83	JAN 10,83	800 800	800 800	1	19.7	2	18570	2	1	101	C
JAN 12,83	JAN 11,83	800 800	800 800	2	5.3	2	18571	2	1	71	C
JAN 15,83	JAN 14,83	800 800	800 800	2	7.3	2	18572	2	1	***	IKFE
JAN 17,83	JAN 16,83	800 800	800 800	2	1.1	2	18573	2	1	***	KE
JAN 23,83	JAN 20,83	800 800	800 800	2	0.7	2	18575	2	1	U 100	CDHL Y3
JAN 24,83	JAN 23,83	800 800	800 800	3	1.5	2	18576	2	1	***	EK
JAN 25,83	JAN 24,83	800 800	800 800	2	2.5	2	18577	2	1	***	CL N
JAN 26,83	JAN 25,83	800 800	800 800	3	1.5	2	18578	2	1	U 12	DHL N
JAN 27,83	JAN 26,83	800 800	800 800	2	0.3	2	18579	2	1	***	EIK NV3
JAN 30,83	JAN 27,83	800 800	800 800	1	1.3	2	18580	2	1	148	
JAN 31,83	JAN 30,83	800 800	800 800	3	4.7	2	18581	2	1	94	
FEB 1,83	JAN 31,83	800 800	800 800	2	***	2	18582	2	1	***	D
FEB 2,83	FEB 1,83	800 800	800 800	1	3.9	2	18583	2	1	94	CD
FEB 3,83	FEB 2,83	800 800	800 800	1	13.3	2	18584	2	1	83	C
FEB 5,83	FEB 4,83	800 800	800 800	2	***	2	18585	2	1	***	C
FEB 7,83	FEB 6,83	800 800	800 800	2	4.9	2	18586	2	1	***	
FEB 8,83	FEB 7,83	800 800	800 800	2	***	2	18587	2	1	***	
FEB 16,83	FEB 15,83	800 800	800 800	3	1.3	2	18590	2	1	102	D
FEB 17,83	FEB 16,83	800 800	800 800	1	8.9	2	18591	2	1	77	CD
FEB 23,83	FEB 22,83	800 800	800 800	3	***	2	18592	2	1	***	C
MAR 4,83	MAR 3,83	800 800	800 800	1	2.9	2	18593	2	1	106	CD
MAR 7,83	MAR 6,83	800 800	800 800	1	1.7	2	18595	2	1	59	C
MAR 8,83	MAR 7,83	800 800	800 800	1	1.5	2	18596	2	1	57	C
MAR 9,83	MAR 8,83	800 800	800 800	1	9.1	2	18597	2	1	93	C
MAR 19,83	MAR 18,83	800 800	800 800	1	4.7	2	18598	2	1	114	C
MAR 20,83	MAR 19,83	800 800	800 800	2	4.6	2	18599	2	1	***	EFIK NC
MAR 21,83	MAR 20,83	800 800	800 800	2	7.9	2	18600	2	1	22	C
MAR 22,83	MAR 21,83	800 800	800 800	2	3.1	2	63001	2	1	***	EFIK
MAR 23,83	MAR 22,83	800 800	800 800	2	4.4	2	63002	2	1	8	CD N
MAR 28,83	MAR 27,83	800 800	800 800	3	***	2	63003	2	1	***	
MAR 29,83	MAR 28,83	800 800	800 800	2	3.9	2	63004	2	1	75	C JH
APR 3,83	APR 2,83	800 800	800 800	1	2.7	2	63005	2	1	58	CD
APR 4,83	APR 3,83	800 800	800 800	1	13.1	2	63006	2	1	64	
APR 7,83	APR 6,83	800 800	800 800	1	2.0	1	63007	2	1	69	
APR 8,83	APR 7,83	800 800	800 800	1	22.2	1	63008	2	1	97	C
APR 10,83	APR 9,83	800 800	800 800	1	2.6	1	63009	2	1	125	N
APR 11,83	APR 10,83	800 800	800 800	1	7.6	1	63010	2	1	84	CD
APR 14,83	APR 13,83	800 800	800 800	1		1		2	1		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM 803

PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7,83	JAN 6,83	136.0	*****	*****	*****	*****	*****	*****
JAN 8,83	JAN 7,83	7.0	*****	*****	4.45	0.0664	*****	*****
JAN 11,83	JAN 10,83	1284.0	*****	4.49	4.72	0.0470	2.05	0.45
JAN 12,83	JAN 11,83	244.0	*****	4.31	*****	*****	*****	*****
JAN 15,83	JAN 14,83	*****	*****	*****	*****	*****	*****	*****
JAN 17,83	JAN 16,83	*****	*****	*****	*****	*****	*****	*****
JAN 23,83	JAN 20,83	45.0	*****	*****	U 3.82	G 0.2120	U 9.40	2.10
JAN 24,83	JAN 23,83	*****	*****	*****	*****	*****	*****	*****
JAN 25,83	JAN 24,83	45.0	*****	*****	3.60	G 0.2960	*****	*****
JAN 26,83	JAN 25,83	12.0	*****	*****	*****	*****	*****	*****
JAN 27,83	JAN 26,83	*****	*****	*****	*****	*****	*****	*****
JAN 30,83	JAN 27,83	124.0	G 73.0	*****	3.81	0.1908	5.05	1.40
JAN 31,83	JAN 30,83	286.0	48.9	4.02	4.02	0.1312	4.55	0.66
FEB 1,83	JAN 31,83	13.0	*****	4.22	*****	0.0970	3.25	0.31
FEB 2,83	FEB 1,83	237.0	30.7	4.13	4.17	0.1062	2.70	0.58
FEB 3,83	FEB 2,83	709.0	37.3	*****	3.92	0.1532	3.30	1.37
FEB 5,83	FEB 4,83	47.0	*****	*****	*****	*****	*****	*****
FEB 7,83	FEB 6,83	*****	*****	*****	*****	*****	*****	*****
FEB 8,83	FEB 7,83	10.0	*****	*****	4.17	0.0934	3.65	1.13
FEB 16,83	FEB 15,83	52.0	*****	*****	U 3.97	0.1262	U 15.00	U 5.20
FEB 17,83	FEB 16,83	85.0	*****	3.86	3.90	0.1498	4.60	0.80
FEB 23,83	FEB 22,83	440.0	61.0	*****	4.27	0.0884	8.20	2.10
MAR 4,83	MAR 3,83	56.0	*****	4.27	4.22	0.0746	3.60	0.40
MAR 7,83	MAR 6,83	198.0	33.0	*****	*****	*****	7.00	1.89
MAR 8,83	MAR 7,83	65.0	*****	*****	*****	*****	8.30	1.55
MAR 9,83	MAR 8,83	55.0	*****	*****	4.70	0.0414	1.50	0.28
MAR 19,83	MAR 18,83	543.0	15.5	*****	4.81	0.0376	1.20	0.15
MAR 20,83	MAR 19,83	345.0	10.6	*****	*****	*****	*****	*****
MAR 21,83	MAR 20,83	*****	*****	*****	*****	0.0152	0.80	0.04
MAR 22,83	MAR 21,83	114.0	7.5	*****	U 6.95	*****	*****	*****
MAR 23,83	MAR 22,83	*****	*****	*****	*****	*****	5.95	1.88
MAR 26,83	MAR 25,83	25.0	*****	*****	U 4.03	0.1400	4.75	0.94
MAR 29,83	MAR 28,83	65.0	*****	*****	U 5.29	0.0240	3.90	1.23
APR 3,83	APR 2,83	189.0	*****	6.70	4.16	0.0968	5.20	0.83
APR 4,83	APR 3,83	101.0	*****	4.30	*****	*****	3.55	0.42
APR 7,83	APR 6,83	564.0	36.3	*****	4.27	0.0958	3.65	0.56
APR 8,83	APR 7,83	89.0	*****	4.72	4.66	0.0468	1.15	0.21
APR 10,83	APR 9,83	1394.0	17.5	4.29	4.17	0.1014	5.05	0.61
APR 11,83	APR 10,83	210.0	43.8	4.29	4.18	0.0990	3.35	0.52
APR 14,83	APR 13,83	413.0	39.0	4.29	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03										PAGE : 3	
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L			
JAN 7,83	JAN 6,83	*****	*****	*****	*****	*****	*****	*****			
JAN 8,83	JAN 7,83	*****	*****	*****	*****	*****	*****	0.0355			
JAN 11,83	JAN 10,83	*****	0.28	*****	*****	*****	*****	0.0191			
JAN 12,83	JAN 11,83	*****	*****	*****	*****	*****	*****	*****			
JAN 15,83	JAN 14,83	*****	*****	*****	*****	*****	*****	*****			
JAN 17,83	JAN 16,83	*****	*****	*****	*****	*****	0.232	0.1514	U		
JAN 23,83	JAN 20,83	*****	U 1.22	*****	*****	*****	*****	*****			
JAN 24,83	JAN 23,83	*****	*****	*****	*****	*****	*****	0.2512			
JAN 25,83	JAN 24,83	*****	*****	*****	*****	*****	*****	*****			
JAN 26,83	JAN 25,83	*****	*****	*****	*****	*****	*****	*****			
JAN 27,83	JAN 26,83	*****	*****	*****	*****	*****	*****	*****			
JAN 30,83	JAN 27,83	0.32	0.59	0.070	0.115	0.250	0.650	0.1549			
JAN 31,83	JAN 30,83	0.08	0.15	0.015	0.035	0.050	0.720	0.0955	D		
FEB 1,83	JAN 31,83	*****	*****	*****	*****	*****	*****	*****			
FEB 2,83	FEB 1,83	0.17	0.29	0.015	0.160	0.165	0.164	0.0676			
FEB 3,83	FEB 2,83	0.08	0.36	0.015	0.090	0.155	0.244	0.0813			
FEB 5,83	FEB 4,83	*****	0.91	*****	*****	*****	*****	0.1202			
FEB 7,83	FEB 6,83	*****	*****	*****	*****	*****	*****	*****			
FEB 8,83	FEB 7,83	*****	*****	*****	*****	*****	*****	0.0676			
FEB 16,83	FEB 15,83	*****	0.53	*****	0.175	0.470	0.550	0.1072	U		
FEB 17,83	FEB 16,83	1.02	1.40	0.170	0.030	0.065	*****	0.1259			
FEB 23,83	FEB 22,83	0.12	0.22	0.025	0.075	0.230	*****	0.0537			
MAR 4,83	MAR 3,83	*****	0.52	*****	0.075	0.230	*****	0.0603			
MAR 7,83	MAR 6,83	0.50	0.38	0.095	U 0.380	U 0.790	*****	*****			
MAR 8,83	MAR 7,83	*****	U 1.30	U 0.400	*****	*****	*****	*****			
MAR 9,83	MAR 8,83	*****	U 0.86	*****	0.080	0.200	0.218	0.0200			
MAR 19,83	MAR 18,83	0.15	0.29	0.045	0.055	0.070	0.232	0.0155			
MAR 20,83	MAR 19,83	0.06	0.09	0.010	*****	*****	*****	*****			
MAR 21,83	MAR 20,83	*****	*****	*****	0.025	0.060	<M 0.002	U 0.0001			
MAR 22,83	MAR 21,83	0.89	0.07	U 0.275	*****	*****	*****	*****			
MAR 23,83	MAR 22,83	*****	*****	*****	*****	*****	*****	*****			
MAR 28,83	MAR 27,83	*****	U 1.23	*****	0.060	0.105	0.520	U 0.0933			
MAR 29,83	MAR 28,83	0.25	0.27	0.060	U 0.760	U 0.910	0.170	U 0.0051			
APR 3,83	APR 2,83	U 2.00	U 1.37	U 0.500	U 0.430	0.470	*****	0.0692			
APR 4,83	APR 3,83	0.40	0.64	0.090	0.180	0.180	0.155	*****			
APR 7,83	APR 6,83	0.30	0.24	0.040	D 0.130	0.155	0.164	0.0537			
APR 8,83	APR 7,83	0.32	0.25	0.080	0.035	0.030	0.164	0.0219			
APR 10,83	APR 9,83	0.09	0.06	0.005	0.215	0.250	0.800	0.0676			
APR 11,83	APR 10,83	0.28	0.35	0.050	0.110	U 0.160	0.264	0.0661			
APR 14,83	APR 13,83	0.20	0.25	0.035	*****	*****	*****	*****			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEN #03										PAGE : 4	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
APR 15.83	APR 14.83	800 800	800 1600	1	16.4	1	63011	2	1	99	D
APR 17.83	APR 16.83	800 800	800 1600	3	0.6	1	63012	2	1	51	C
APR 18.83	APR 17.83	800 800	800 1600	3	7.4	1	63013	2	1	74	J
APR 27.83	APR 26.83	800 800	2300 2400	1	3.0	1	63014	2	1	56	C
APR 29.83	APR 28.83	800 800	1000 1800	1	14.2	1	63015	2	1	102	C
APR 30.83	APR 29.83	800 800	800 1600	1	14.4	1	63016	2	1	107	CD
MAY 1.83	APR 30.83	800 800	800 1600	1	14.4	1	63017	2	1	107	CD
MAY 2.83	MAY 1.83	800 800	800 1600	1	16.6	1	63018	2	1	79	
MAY 3.83	MAY 2.83	800 800	1330 2000	1	26.2	1	63019	2	1	94	C
MAY 4.83	MAY 3.83	800 800	1200 1600	1	5.0	1	63020	2	1	85	D
MAY 5.83	MAY 4.83	800 800	800 1600	1	2.2	1	63021	2	1	30	CD
MAY 7.83	MAY 6.83	800 800	800 1600	1	1.4	1	63022	2	1	57	
MAY 8.83	MAY 7.83	800 800	800 1600	1	15.8	1	63023	2	1	90	
MAY 15.83	MAY 14.83	800 800	800 1600	1	13.2	1	63024	2	1	97	C
MAY 20.83	MAY 19.83	800 800	800 1600	1	15.2	1	63025	2	1	207	N
MAY 23.83	MAY 22.83	800 800	800 1600	1	9.4	1	63026	2	1	93	
MAY 26.83	MAY 25.83	800 800	800 1600	1	7.0	1	63027	2	1	80	A
MAY 30.83	MAY 29.83	800 800	1100 1700	1	19.8	1	63028	2	1	100	
MAY 31.83	MAY 30.83	800 800	1600 1700	1	0.3	1	63029	2	1	77	C
JUN 1.83	MAY 31.83	800 800	1200 1800	1	13.0	1	63030	2	1	98	C
JUN 4.83	JUN 3.83	800 800	800 1600	1	8.0	1	63031	2	1	81	
JUN 5.83	JUN 4.83	800 800	800 1600	1	4.0	1	63032	2	1	98	
JUN 6.83	JUN 5.83	800 800	800 1600	1	4.3	1	63033	2	1	103	
JUN 7.83	JUN 6.83	800 800	800 1600	1	3.6	1	63034	2	1	250	P
JUN 10.83	JUN 9.83	800 800	800 1600	1	0.9	1	63035	2	1	36	N
JUN 28.83	JUN 27.83	800 800	800 1600	1	34.8	1	63037	2	1	101	
JUL 1.83	JUN 30.83	800 800	1700 1900	1	3.9	1	63038	2	1	86	C
JUL 5.83	JUL 4.83	800 800	800 1600	1	43.6	1	63039	2	1	105	D
JUL 29.83	JUL 28.83	800 800	100 800	1	82.4	1	63040	2	1	103	C
JUL 30.83	JUL 29.83	800 800	800 1600	1	5.2	1	63041	2	1	88	CD
JUL 31.83	JUL 30.83	800 800	800 1600	1	22.1	1	63042	2	1	101	C
AUG 1.83	JUL 31.83	800 800	800 1600	1	6.3	1	63043	2	1	97	CD
AUG 4.83	AUG 3.83	800 800	800 1600	1	13.0	1	63044	2	1	99	
AUG 5.83	AUG 4.83	800 800	800 1600	1	5.2	1	63045	2	1	97	C
AUG 9.83	AUG 8.83	800 800	800 1600	1	11.1	2	63046	2	1	94	J
AUG 11.83	AUG 10.83	800 800	2330 800	1	23.2	1	63047	2	1	90	
AUG 12.83	AUG 11.83	800 800	800 1600	1	9.0	1	63048	2	1	95	M
AUG 18.83	AUG 17.83	800 800	1700 1800	1	1.2	1	63050	2	1	81	
AUG 22.83	AUG 21.83	800 800	2300 200	1	15.0	1	63052	2	1	116	J
AUG 26.83	AUG 25.83	800 806	600 730	1	3.6	1	63049	2	1	61	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH6.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	PAGE : 5
APR 15,83	APR 14,83	1042.0	25.3	4.66	4.43	0.0634	2.75	0.32	
APR 17,83	APR 16,83	20.0	*****	*****	4.34	0.0820	*****	*****	
APR 18,83	APR 17,83	354.0	13.1	5.37	4.92	0.0344	1.15	0.38	
APR 27,83	APR 26,83	108.0	*****	*****	7.28	0.0200	4.20	0.53	
APR 29,83	APR 28,83	929.0	19.1	4.47	4.68	0.0448	2.40	0.33	
APR 30,83	APR 29,83	40.0	*****	*****	3.67	0.2820	*****	*****	
MAY 1,83	APR 30,83	989.0	17.9	4.44	4.51	0.0520	1.65	0.20	
MAY 2,83	MAY 1,83	848.0	18.7	4.34	4.44	0.0540	1.80	0.14	
MAY 3,83	MAY 2,83	1585.0	20.9	4.42	4.55	0.0496	2.55	0.35	
MAY 4,83	MAY 3,83	274.0	20.1	4.33	4.43	0.0504	2.25	0.12	
MAY 5,83	MAY 4,83	43.0	*****	*****	5.63	0.0304	4.45	1.67	
MAY 7,83	MAY 6,83	52.0	*****	*****	5.73	0.0278	7.30	0.79	
MAY 8,83	MAY 7,83	916.0	17.6	4.58	4.71	0.0436	2.30	0.23	
MAY 15,83	MAY 14,83	829.0	29.9	4.31	4.55	0.0620	4.15	0.50	
MAY 20,83	MAY 19,83	2019.0	15.0	4.44	4.65	0.0454	1.70	0.10	
MAY 23,83	MAY 22,83	565.0	41.1	4.02	4.15	0.1046	3.75	0.49	
MAY 26,83	MAY 25,83	359.0	31.4	4.06	4.29	0.0786	2.95	0.39	
MAY 30,83	MAY 29,83	1278.0	37.9	4.08	4.23	0.0914	3.65	0.54	
MAY 31,83	MAY 30,83	15.0	*****	*****	5.26	0.0364	*****	*****	
JUN 1,83	MAY 31,83	817.0	19.4	4.51	4.58	0.1376	1.95	0.24	
JUN 4,83	JUN 3,83	418.0	32.5	4.09	4.21	0.0874	3.00	0.32	
JUN 5,83	JUN 4,83	252.0	32.1	4.13	4.24	0.0836	3.15	0.34	
JUN 6,83	JUN 5,83	284.0	9.8	4.66	5.11	0.0286	1.20	0.16	
JUN 7,83	JUN 6,83	577.0	2.6	5.48	5.83	0.0222	0.20	0.02	
JUN 10,83	JUN 9,83	21.0	*****	*****	4.77	0.0658	*****	*****	
JUN 28,83	JUN 27,83	2273.0	28.1	4.14	4.29	0.0746	3.10	0.27	
JUL 1,83	JUN 30,83	222.0	*****	3.92	4.02	0.1288	4.65	0.57	
JUL 5,83	JUL 4,83	2945.0	11.7	4.68	4.86	0.0348	1.80	0.17	
JUL 29,83	JUL 28,83	5478.0	21.3	4.38	4.46	0.0552	2.50	0.24	
JUL 30,83	JUL 29,83	295.0	42.5	4.08	4.17	0.0948	4.15	0.79	
JUL 31,83	JUL 30,83	1444.0	20.3	4.25	4.45	0.0564	1.90	0.16	
AUG 1,83	JUL 31,83	395.0	39.5	4.08	4.20	0.0892	4.25	0.54	
AUG 4,83	AUG 3,83	830.0	31.0	4.11	4.25	0.0736	2.95	0.39	
AUG 5,83	AUG 4,83	326.0	56.0	4.09	*****	*****	8.65	0.78	
AUG 9,83	AUG 8,83	669.0	16.0	5.76	6.89	0.0194	2.75	0.42	
AUG 11,83	AUG 10,83	1345.0	39.3	3.88	4.28	0.0960	3.65	0.51	
AUG 12,83	AUG 11,83	551.0	34.0	3.92	4.28	0.0900	3.25	0.29	
AUG 18,83	AUG 17,83	63.0	*****	*****	3.72	0.2560	14.60	1.56	
AUG 22,83	AUG 21,83	1123.0	31.5	3.76	4.30	0.0778	3.30	0.41	
AUG 26,83	AUG 25,83	142.0	22.6	*****	4.45	0.0616	2.05	0.45	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 15,83	APR 14,83	0.44	0.17	0.045	0.050	0.100	0.206	0.0372
APR 17,83	APR 16,83	*****	*****	*****	*****	*****	*****	0.0457
APR 18,83	APR 17,83	0.23	0.12	0.045	0.040	0.055	0.360	0.0120
APR 27,83	APR 26,83	U 2.55	0.38	U 0.550	0.145	0.240	*****	U 0.0001
APR 29,83	APR 28,83	0.59	0.08	0.085	0.030	0.055	0.440	0.0209
APR 30,83	APR 29,83	*****	*****	*****	*****	*****	*****	0.2138
MAY 1,83	APR 30,83	0.03	0.03	0.020	0.035	0.045	0.184	0.0309
MAY 2,83	MAY 1,83	0.09	0.06	0.015	0.040	0.040	0.168	0.0363
MAY 3,83	MAY 2,83	0.37	0.19	0.060	0.070	0.130	0.470	0.0282
MAY 4,83	MAY 3,83	0.18	0.08	0.035	0.070	0.055	0.162	0.0372
MAY 5,83	MAY 4,83	*****	0.66	*****	*****	*****	*****	G 0.0023
MAY 7,83	MAY 6,83	*****	0.56	*****	*****	*****	*****	U 0.0019
MAY 8,83	MAY 7,83	0.37	0.18	0.070	0.030	0.095	0.326	0.0195
MAY 15,83	MAY 14,83	0.35	0.19	0.080	0.065	0.085	1.070	0.0282
MAY 20,83	MAY 19,83	0.11	0.08	0.030	0.020	0.035	0.202	0.0224
MAY 23,83	MAY 22,83	0.09	0.18	0.025	0.035	0.045	0.560	0.0708
MAY 26,83	MAY 25,83	0.23	0.14	0.040	0.050	0.055	0.400	U 0.0513
MAY 30,83	MAY 29,83	0.25	0.16	0.055	0.055	0.075	0.610	0.0589
MAY 31,83	MAY 30,83	*****	*****	*****	*****	*****	*****	G 0.0055
JUN 1,83	MAY 31,83	0.19	0.14	0.035	0.045	0.045	0.360	0.0263
JUN 4,83	JUN 3,83	0.13	0.10	0.035	0.035	0.040	0.126	0.0617
JUN 5,83	JUN 4,83	0.22	0.12	0.045	0.095	0.125	0.352	0.0575
JUN 6,83	JUN 5,83	0.14	0.22	0.040	0.095	0.140	0.242	G 0.0078
JUN 7,83	JUN 6,83	0.07	0.10	0.025	0.055	0.095	0.036	G 0.0015
JUN 10,83	JUN 9,83	*****	*****	*****	*****	*****	*****	0.0170
JUN 26,83	JUN 27,83	0.15	0.07	0.030	0.015	0.020	0.290	0.0513
JUL 1,83	JUN 30,83	0.29	0.21	0.075	0.020	0.065	0.120	0.0955
JUL 5,83	JUL 4,83	0.25	0.15	0.045	0.040	0.075	0.246	0.0138
JUL 29,83	JUL 28,83	0.26	0.11	0.050	0.030	0.045	0.236	0.0347
JUL 30,83	JUL 29,83	0.68	0.27	0.095	0.060	0.105	0.370	0.0676
JUL 31,83	JUL 30,83	0.02	0.06	0.015	0.025	0.035	0.154	0.0355
AUG 1,83	JUL 31,83	0.15	0.13	0.040	0.035	0.035	0.610	0.0631
AUG 4,83	AUG 3,83	0.22	0.16	0.055	0.040	0.055	0.206	0.0562
AUG 5,83	AUG 4,83	0.35	0.15	0.085	0.045	0.040	1.110	*****
AUG 9,83	AUG 8,83	1.08	0.18	0.185	0.070	0.030	0.720	U 0.0001
AUG 11,83	AUG 10,83	0.18	0.21	0.035	0.040	0.055	0.460	0.0525
AUG 12,83	AUG 11,83	0.10	0.10	0.015	0.015	0.020	0.164	0.0525
AUG 18,83	AUG 17,83	1.97	0.37	0.300	0.085	0.090	0.990	U 0.1905
AUG 22,83	AUG 21,83	0.25	0.09	0.035	0.025	0.045	0.268	0.0501
AUG 26,83	AUG 25,83	0.21	0.13	0.030	0.050	0.080	0.274	0.0355

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEN #03										PAGE : 7	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
AUG 31.83	AUG 30.83	800 800	830 2000	1	17.1	1	63053	2	1	91	J
SEP 7.83	SEP 6.83	800 800	900 600	1	16.8	1	63054	2	1	88	
SEP 11.83	SEP 10.83	800 800	****	1	4.1	1	63055	2	1	83	J
SEP 16.83	SEP 15.83	800 800	100 800	1	3.8	1	63063	2	1	68	
SEP 17.83	SEP 16.83	800 800	800 1700	1	22.2	1	63062	2	1	98	
SEP 19.83	SEP 18.83	800 800	830 1200	1	16.0	1	63061	2	1	100	
SEP 21.83	SEP 20.83	800 800	800 800	1	33.0	1	63060	2	1	103	J
SEP 22.83	SEP 21.83	800 800	200 800	1	1.0	1	63059	2	1	45	N
SEP 23.83	SEP 22.83	800 800	800 600	1	19.9	1	63058	2	1	95	
SEP 24.83	SEP 23.83	800 800	1200 1800	1	1.6	1	63057	2	1	54	
SEP 26.83	SEP 25.83	800 800	1800 100	1	1.1	1	63056	2	1	39	NT
OCT 5.83	OCT 4.83	800 800	2000 2100	1	1.7	1	63069	2	1	32	N
OCT 6.83	OCT 5.83	800 800	1600 500	1	4.6	1	63068	2	1	85	J
OCT 7.83	OCT 6.83	800 800	1030 1200	1	1.8	1	63067	2	1	71	
OCT 9.83	OCT 8.83	800 800	****	1	7.6	1	63066	2	1	85	
OCT 12.83	OCT 11.83	800 800	2200 800	1	6.8	1	63065	2	1	81	
OCT 13.83	OCT 12.83	800 800	800 600	1	9.0	1	63064	2	1	76	
OCT 14.83	OCT 13.83	800 800	****	1	11.0	1	63070	2	1	89	J
OCT 15.83	OCT 14.83	800 800	****	3	1.0	1	63071	2	1	37	N
OCT 17.83	OCT 16.83	800 800	1200 1600	1	3.0	1	63072	2	1	81	HM
OCT 23.83	OCT 22.83	800 800	1300 100	1	22.0	1	63073	2	1	91	JC
OCT 24.83	OCT 23.83	800 800	****	4	1.0	1	63074	2	1	15	N
OCT 26.83	OCT 25.83	800 800	****	1	2.2	1	63075	2	1	73	
NOV 2.83	NOV 1.83	800 800	2200 630	1	8.7	1	63076	2	1	88	J
NOV 3.83	NOV 2.83	800 800	****	1	10.0	1	63077	2	1	90	J
NOV 4.83	NOV 3.83	800 800	****	2	0.2	1	63078	2	1	***	
NOV 11.83	NOV 10.83	800 800	100 800	1	13.3	1	63079	2	1	87	
NOV 12.83	NOV 11.83	800 800	****	2	4.6	1	63080	2	1	53	FC
NOV 16.83	NOV 15.83	730 730	****	3	10.0	1	63081	2	1	85	CD
NOV 17.83	NOV 16.83	730 730	****	2	4.2	1	63082	2	1	30	CD
NOV 20.83	NOV 19.83	800 1000	2100 630	1	1.3	2	63083	2	1	56	CD
NOV 21.83	NOV 20.83	1000 700	1030 2130	1	5.6	2	63084	2	1	84	C
NOV 24.83	NOV 23.83	800 800	****	1	7.1	2	63085	2	1	10	E
NOV 26.83	NOV 25.83	800 1200	800 1400	2	0.6	2	63087	2	1	151	NJ
NOV 29.83	NOV 28.83	800 800	****	1	4.2	2	63088	2	1	97	JHM
NOV 29.83	NOV 28.83	800 800	****	1	10.4	2	63089	2	1	12	C
DEC 1.83	NOV 30.83	800 800	800 800	2	8.4	2	63090	2	1	***	N
DEC 2.83	DEC 1.83	800 800	****	2	***	W	63091	2	1	83	E
DEC 4.83	DEC 3.83	800 1200	****	3	3.2	2	63092	2	1	72	
DEC 6.83	DEC 5.83	800 800	****	2	15.8	2	63093	2	1		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PAGE : 8

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 31,83	AUG 30,83	1002.0	15.9	4.15	4.80	0.0392	1.80	0.34
SEP 7,83	SEP 6,83	958.0	36.2	3.84	4.26	0.0880	4.35	0.32
SEP 11,83	SEP 10,83	220.0	18.4	4.74	U	0.0244	3.15	0.62
SEP 16,83	SEP 15,83	166.0	50.5	*****	4.06	0.0890	3.70	0.91
SEP 17,83	SEP 16,83	1403.0	31.3	3.93	4.23	0.0754	3.30	0.29
SEP 19,83	SEP 18,83	1032.0	48.2	3.72	4.10	0.0888	4.80	0.52
SEP 21,83	SEP 20,83	2186.0	12.9	4.25	4.76	0.0250	1.20	0.09
SEP 22,83	SEP 21,83	29.0	*****	*****	4.73	0.0234	1.20	0.41
SEP 23,83	SEP 22,83	1219.0	6.2	4.61	U	0.0136	0.65	0.09
SEP 24,83	SEP 23,83	56.0	*****	*****	U	0.0136	0.65	0.09
SEP 26,83	SEP 25,83	28.0	*****	*****	U	0.0752	0.40	0.02
OCT 5,83	OCT 4,83	35.0	*****	*****	U	0.0200	5.00	0.72
OCT 6,83	OCT 5,83	251.0	7.3	5.03	U	0.0230	10.00	1.28
OCT 7,83	OCT 6,83	82.0	*****	*****	U	0.0166	1.00	0.28
OCT 9,83	OCT 8,83	418.0	17.0	4.55	U	0.0376	1.25	0.14
OCT 12,83	OCT 11,83	355.0	15.5	4.36	4.77	0.0476	2.70	0.40
OCT 13,83	OCT 12,83	444.0	17.0	4.17	4.54	0.0518	1.50	0.24
OCT 14,83	OCT 13,83	634.0	12.5	3.60	4.99	0.0366	1.95	0.22
OCT 15,83	OCT 14,83	24.0	*****	*****	U	0.0254	2.00	0.21
OCT 17,83	OCT 16,83	157.0	30.1	4.20	6.69	0.0764	*****	*****
OCT 24,83	OCT 23,83	1284.0	10.6	4.20	4.38	0.0306	3.90	0.37
OCT 26,83	OCT 25,83	103.0	39.5	*****	*****	*****	1.30	0.18
NOV 2,83	NOV 1,83	496.0	58.0	3.45	4.19	0.1042	4.05	0.74
NOV 3,83	NOV 2,83	579.0	26.5	3.72	U	0.1490	6.05	1.56
NOV 4,83	NOV 3,83	*****	*****	*****	4.40	0.0738	3.30	0.31
NOV 11,83	NOV 10,83	747.0	17.2	4.27	*****	*****	*****	*****
NOV 12,83	NOV 11,83	158.0	4.8	3.86	4.66	0.0424	1.60	0.23
NOV 16,83	NOV 15,83	551.0	17.0	3.70	U	0.0132	0.45	0.01
NOV 17,83	NOV 16,83	82.0	18.4	3.18	4.60	0.0494	0.90	0.48
NOV 20,83	NOV 19,83	47.0	*****	*****	U	0.0286	1.70	0.56
NOV 21,83	NOV 20,83	303.0	27.0	3.16	3.85	D 0.1064	7.20	2.03
NOV 24,83	NOV 23,83	105.0	32.5	3.70	4.44	0.0608	3.00	0.37
NOV 26,83	NOV 25,83	4.0	*****	*****	4.28	0.0760	2.80	0.49
NOV 28,83	NOV 27,83	409.0	14.0	3.16	*****	*****	*****	*****
NOV 29,83	NOV 28,83	652.0	24.8	3.70	4.76	0.0362	1.20	0.24
DEC 1,83	NOV 30,83	66.0	*****	*****	4.39	0.0630	3.30	0.35
DEC 2,83	DEC 1,83	5.0	*****	*****	U	0.0110	1.25	0.29
DEC 4,83	DEC 3,83	172.0	10.5	*****	7.95	0.0294	1.50	0.12
DEC 6,83	DEC 5,83	737.0	9.0	*****	4.97	0.0312	0.75	0.16

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 31,83	AUG 30,83	0.16	0.05	0.030	0.025	0.015	0.450	0.0158
SEP 7,83	SEP 6,83	0.18	0.08	0.020	0.035	0.050	0.460	0.0550
SEP 11,83	SEP 10,83	0.92	0.22	0.220	0.075	0.170	0.660	U 0.0010
SEP 16,83	SEP 15,83	0.41	0.50	0.095	0.140	0.225	0.304	0.0871
SEP 17,83	SEP 16,83	0.12	0.06	0.010	0.020	0.005	0.410	0.0589
SEP 19,83	SEP 18,83	0.32	0.16	0.035	0.060	0.060	0.450	0.0794
SEP 21,83	SEP 20,83	0.11	0.04	0.010	0.020	0.025	0.096	0.0174
SEP 22,83	SEP 21,83	0.15	0.24	0.020	0.025	0.010	0.190	0.0186
SEP 23,83	SEP 22,83	0.15	0.03	0.020	0.025	0.010	0.190	U 0.0000
SEP 24,83	SEP 23,83	0.15	0.09	0.020	0.025	0.010	0.190	U 0.0000
SEP 26,83	SEP 25,83	0.15	0.24	0.020	0.025	0.010	0.190	0.0794
OCT 5,83	OCT 4,83	0.15	0.47	0.020	0.025	0.010	0.190	U 0.0001
OCT 6,83	OCT 5,83	0.22	0.06	0.040	0.030	0.040	0.420	U 0.0020
OCT 7,83	OCT 6,83	0.20	0.14	0.360	0.075	0.060	0.380	U 0.0000
OCT 9,83	OCT 8,83	0.77	0.06	0.075	0.055	0.020	0.380	0.0170
OCT 12,83	OCT 11,83	0.08	0.08	0.005	0.040	0.050	0.196	0.0288
OCT 13,83	OCT 12,83	0.12	0.10	0.020	0.050	0.050	0.258	0.0288
OCT 14,83	OCT 13,83	0.42	0.11	0.205	0.090	0.060	0.068	0.0102
OCT 15,83	OCT 14,83	0.37	0.28	0.075	0.055	0.080	0.224	U 0.0002
OCT 17,83	OCT 16,83	0.24	0.09	0.080	0.050	0.120	0.096	0.0417
OCT 23,83	OCT 22,83	0.16	0.27	0.030	0.050	0.070	0.530	G 0.0068
OCT 24,83	OCT 23,83	0.37	0.30	0.090	0.145	0.250	1.270	0.0646
OCT 26,83	OCT 25,83	0.10	0.10	0.010	0.075	0.100	0.380	U 0.0912
NOV 2,83	NOV 1,83	0.10	0.10	0.010	0.075	0.100	0.380	0.0398
NOV 3,83	NOV 2,83	0.05	0.07	0.010	0.015	0.020	0.236	0.0219
NOV 4,83	NOV 3,83	0.05	0.07	0.010	0.015	0.020	0.236	0.0219
NOV 11,83	NOV 10,83	0.05	0.07	0.010	0.015	0.020	0.236	0.0219
NOV 12,83	NOV 11,83	0.10	0.10	0.025	0.030	0.035	0.126	U 0.0000
NOV 16,83	NOV 15,83	0.10	0.23	0.025	0.030	0.035	0.156	D 0.0251
NOV 17,83	NOV 16,83	0.10	0.23	0.025	0.030	0.035	0.156	D 0.0251
NOV 20,83	NOV 19,83	0.10	0.23	0.025	0.030	0.035	0.156	U 0.0063
NOV 21,83	NOV 20,83	0.29	0.51	0.035	0.250	0.370	0.288	U 0.1413
NOV 24,83	NOV 23,83	0.26	0.26	0.030	0.035	0.080	0.196	0.0363
NOV 26,83	NOV 25,83	0.19	0.10	0.015	0.025	0.015	0.184	0.0525
NOV 28,83	NOV 27,83	0.06	0.16	0.010	0.025	0.015	0.184	0.0174
NOV 29,83	NOV 28,83	0.06	0.16	0.010	0.025	0.015	0.184	0.0174
DEC 1,83	NOV 30,83	0.10	0.27	0.020	0.020	0.030	0.238	U 0.0000
DEC 2,83	DEC 1,83	0.10	0.07	0.020	0.020	0.030	0.238	0.0107
DEC 4,83	DEC 3,83	0.10	0.07	0.020	0.020	0.030	0.238	0.0107
DEC 6,83	DEC 5,83	0.05	0.08	0.010	0.015	0.025	0.130	0.0126

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM 803

PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS
				01-RAIN		01-STD.		02-APIOS	01-MDE		FIELD OFFICE
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
DEC 7,83	DEC 6,83	800 800	800 800	3	29.8	2	63094	2	1	U	CDFI NH
DEC 10,83	DEC 9,83	800 800	800 800	2	0.8	2	63095	2	1	408	EIK C
DEC 13,83	DEC 12,83	800 800	2000 800	1	3.6	2	63096	2	1	120	CD N
DEC 14,83	DEC 13,83	800 800	800 1000	1	2.8	2	63097	2	1	408	CD N
DEC 17,83	DEC 16,83	800 800	1200 800	2	5.4	2	63098	2	1	408	EIK ID
DEC 18,83	DEC 17,83	800 800	800 800	2	***	2	63099	2	1	408	EIK ID
DEC 19,83	DEC 18,83	800 800	800 800	2	2.0	2	63100	2	1	408	EIK ID
DEC 22,83	DEC 21,83	800 800	800 800	3	1.6	2	63101	2	1	36	N
DEC 25,83	DEC 24,83	800 800	800 800	2	23.4	2	63102	2	1	408	EIK CD
DEC 26,83	DEC 25,83	800 800	800 800	2	0.6	2	63103	2	1	574	CD N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	PAGE : 11
DEC 7,83	DEC 6,83	84.0	*****	*****	U 5.05	0.0280	0.95	0.22	
DEC 10,83	DEC 9,83	*****	*****	*****	*****	*****	*****	*****	
DEC 13,83	DEC 12,83	943.0	31.1	*****	4.21	0.0676	2.65	0.52	
DEC 14,83	DEC 13,83	217.0	25.1	*****	4.31	0.0736	2.20	0.48	
DEC 17,83	DEC 16,83	*****	*****	*****	*****	*****	*****	*****	
DEC 18,83	DEC 17,83	105.0	39.7	*****	4.12	0.0982	3.60	0.66	
DEC 19,83	DEC 18,83	*****	*****	*****	*****	*****	*****	*****	
DEC 22,83	DEC 21,83	37.0	*****	*****	4.18	D 0.0894	5.00	D 1.15	
DEC 25,83	DEC 24,83	*****	*****	*****	*****	*****	*****	*****	
DEC 26,83	DEC 25,83	221.0	6.0	*****	G 5.22	0.0226	0.60	0.24	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03									
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE N+ LAB MG/L	
DEC 7,83	DEC 6,83	0.11	U 0.32	0.025	U 0.035	U 0.215	U 0.152	U 0.0089	
DEC 10,83	DEC 9,83	0.07	0.21	0.015	0.035	0.055	0.228	0.0617	
DEC 13,83	DEC 12,83	0.14	0.09	0.015	0.020	0.035	0.164	0.0490	
DEC 14,83	DEC 13,83	0.14	0.09	0.015	0.020	0.035	0.164	0.0490	
DEC 17,83	DEC 16,83	0.14	0.09	0.015	0.020	0.035	0.164	0.0490	
DEC 18,83	DEC 17,83	0.14	0.09	0.015	0.020	0.035	0.164	0.0490	
DEC 19,83	DEC 18,83	0.14	0.09	0.015	0.020	0.035	0.164	0.0490	
DEC 22,83	DEC 21,83	0.14	0.09	0.015	0.020	0.035	0.164	0.0490	
DEC 25,83	DEC 24,83	0.14	0.09	0.015	0.020	0.035	0.164	0.0490	
DEC 26,83	DEC 25,83	0.26	0.16	0.060	0.025	0.080	0.106	0.0060	

PART IV

CENTRAL REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04										PAGE : 1	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-HOE 03-AES		
JAN 7,83	JAN 6,83	530 530	2000 500	3	4.4	2	18830	2	1	57	C
JAN 11,83	JAN 10,83	530 530	830 200	1	21.2	2	18831	2	1	92	HM
JAN 12,83	JAN 11,83	530 530	800 2130	3	***	2	18832	2	1	***	
JAN 15,83	JAN 14,83	530 530	***	2	7.3	2	18833	2	1	27	HL
JAN 23,83	JAN 22,83	530 1130	2200 300	3	1.0	2	18834	2	1	24	U
JAN 25,83	JAN 24,83	530 530	***	2	1.3	2	18836	2	1	***	CL
JAN 26,83	JAN 25,83	530 530	***	2	2.9	2	18837	2	1	***	EK
JAN 30,83	JAN 29,83	530 1200	200 1200	1	3.3	2	18838	2	1	100	EK
JAN 31,83	JAN 30,83	1200 530	***	3	5.9	2	18839	2	1	15	D
FEB 2,83	FEB 1,83	530 1200	***	1	0.5	2	18840	2	1	37	N
FEB 3,83	FEB 2,83	1200 530	1200 530	2	18.7	2	18841	2	1	101	N
FEB 5,83	FEB 4,83	530 530	***	2	2.8	2	18842	2	1	32	N
FEB 7,83	FEB 6,83	530 530	2100 400	2	4.5	2	18843	2	1	21	D
FEB 15,83	FEB 14,83	530 530	200 500	1	0.3	2	18844	2	1	88	ACD
FEB 17,83	FEB 16,83	530 530	***	1	0.9	2	18846	2	1	81	CD
FEB 19,83	FEB 18,83	530 530	***	2	1.3	2	18847	2	1	31	D
FEB 23,83	FEB 22,83	530 530	1700 300	1	7.6	2	18848	2	1	100	N
FEB 25,83	FEB 24,83	530 530	1630 200	2	0.4	2	18849	2	1	54	C
MAR 4,83	MAR 3,83	530 530	1600 1800	1	0.7	2	18850	2	1	60	D
MAR 7,83	MAR 6,83	1100 530	1530 1830	1	1.8	2	18852	2	1	133	N
MAR 8,83	MAR 7,83	530 530	2030 2400	1	0.9	2	18853	2	1	133	C
MAR 9,83	MAR 8,83	530 530	1700 2200	1	1.8	2	18854	2	1	76	C
MAR 11,83	MAR 10,83	530 530	2000 200	3	1.0	2	18855	2	1	99	D
MAR 19,83	MAR 18,83	530 530	***	1	10.5	2	18857	2	1	97	N
MAR 20,83	MAR 19,83	530 800	***	3	8.1	2	18858	2	1	81	NMH
MAR 21,83	MAR 20,83	800 530	***	2	2.1	2	18859	2	1	220	C
MAR 22,83	MAR 21,83	530 530	600 1500	2	6.3	2	18860	2	1	***	EFIK
MAR 23,83	MAR 22,83	530 530	530 1400	2	1.8	2	18861	2	1	***	EFIK
MAR 27,83	MAR 26,83	530 1100	1800 2130	2	5.2	2	18862	2	1	61	C
MAR 28,83	MAR 27,83	1100 530	1100 1200	3	0.6	2	18863	2	1	106	N
MAR 29,83	MAR 28,83	530 530	800 1200	3	1.1	2	18864	2	1	120	D
APR 3,83	APR 2,83	830 1200	***	1	2.3	2	18865	2	1	43	C
APR 4,83	APR 3,83	1200 530	***	1	2.9	2	18866	2	1	100	N
APR 7,83	APR 6,83	530 530	200 530	1	6.9	2	18867	2	1	99	N
APR 8,83	APR 7,83	530 830	530 1000	1	1.8	2	18868	2	1	120	A
APR 10,83	APR 9,83	830 1200	2000 100	1	27.2	1	18869	2	1	98	C
APR 11,83	APR 10,83	1200 530	1730 2000	1	0.6	1	18870	2	1	64	N
APR 14,83	APR 13,83	530 530	1800 530	1	6.5	1	18871	2	1	89	N
APR 15,83	APR 14,83	530 530	530 2300	1	20.2	1	18872	2	1	98	N
APR 16,83	APR 15,83	830 1200	1300 1500	3	0.4	1	18873	2	1	62	C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELLESELEY/DAILY/AEROCHEM #04

PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7.83	JAN 6.83	162.0	64.0	*****	4.01	0.1504	5.95	1.94
JAN 11.83	JAN 10.83	1255.0	23.1	4.33	4.41	0.0668	1.90	0.35
JAN 12.83	JAN 11.83	83.0	20.0	*****	4.49	0.0636	1.85	0.55
JAN 15.83	JAN 14.83	139.0	41.2	*****	3.84	0.1770	1.90	1.01
JAN 23.83	JAN 22.83	16.0	*****	*****	4.08	0.1084	*****	*****
JAN 25.83	JAN 24.83	*****	*****	*****	*****	*****	*****	*****
JAN 26.83	JAN 25.83	*****	*****	*****	*****	*****	*****	*****
JAN 30.83	JAN 29.83	212.0	33.5	4.19	4.11	0.1126	3.35	0.40
JAN 31.83	JAN 30.83	60.0	*****	*****	4.07	0.1188	3.65	0.70
FEB 2.83	FEB 1.83	12.0	*****	*****	*****	*****	*****	*****
FEB 3.83	FEB 2.83	1211.0	32.0	4.17	4.14	0.1058	2.60	0.40
FEB 5.83	FEB 4.83	59.0	*****	*****	3.99	0.1376	1.70	0.90
FEB 7.83	FEB 6.83	61.0	*****	*****	4.39	0.0680	0.10	0.65
FEB 15.83	FEB 14.83	17.0	*****	*****	3.98	0.1402	*****	*****
FEB 17.83	FEB 16.83	47.0	*****	*****	U 3.66	G 0.2600	5.60	2.65
FEB 19.83	FEB 18.83	26.0	*****	*****	4.35	0.0714	*****	*****
FEB 23.83	FEB 22.83	492.0	49.6	4.00	4.00	0.1278	3.85	0.68
FEB 25.83	FEB 24.83	14.0	*****	*****	*****	*****	*****	*****
MAR 4.83	MAR 3.83	27.0	*****	*****	4.05	0.1174	7.80	2.00
MAR 7.83	MAR 6.83	150.0	42.0	*****	4.14	0.0896	5.40	0.55
MAR 8.83	MAR 7.83	77.0	*****	*****	*****	*****	8.55	1.45
MAR 9.83	MAR 8.83	88.0	*****	*****	3.81	0.2000	5.20	1.65
MAR 11.83	MAR 10.83	64.0	15.1	*****	4.67	0.0414	4.45	1.58
MAR 19.83	MAR 18.83	658.0	10.4	*****	4.86	0.0358	0.85	0.31
MAR 20.83	MAR 19.83	425.0	10.7	*****	U 5.37	0.0234	1.85	0.14
MAR 21.83	MAR 20.83	297.0	*****	*****	*****	*****	*****	0.22
MAR 22.83	MAR 21.83	*****	*****	*****	*****	*****	*****	*****
MAR 23.83	MAR 22.83	*****	*****	*****	*****	*****	*****	*****
MAR 26.83	MAR 25.83	204.0	13.5	*****	4.78	0.0392	1.70	0.36
MAR 28.83	MAR 27.83	41.0	*****	*****	*****	*****	6.65	1.28
MAR 29.83	MAR 28.83	85.0	*****	*****	3.85	0.1832	5.30	1.24
APR 3.83	APR 2.83	64.0	*****	*****	3.98	0.1456	5.05	1.65
APR 4.83	APR 3.83	187.0	*****	4.22	4.08	0.3060	4.40	0.74
APR 7.83	APR 6.83	442.0	37.7	4.26	4.16	0.0978	3.30	0.39
APR 8.83	APR 7.83	139.0	*****	*****	4.04	0.1374	4.50	0.78
APR 10.83	APR 9.83	1717.0	20.0	4.70	4.49	0.0590	1.55	0.29
APR 11.83	APR 10.83	25.0	*****	*****	A 3.89	*****	*****	*****
APR 14.83	APR 13.83	373.0	*****	4.09	4.03	0.1476	5.05	0.88
APR 15.83	APR 14.83	1278.0	22.4	4.64	4.43	0.0628	2.10	0.26
APR 16.83	APR 15.83	16.0	*****	*****	*****	*****	*****	*****

APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04										PAGE : 4	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		
APR 18,83	APR 17,83	1100 530	****	2	5.1	2	18874	2	1	45	D N
APR 27,83	APR 26,83	530 530	2400 400	1	0.6	2	18875	2	1	213	CDP N
APR 29,83	APR 28,83	530 530	****	1	10.3	1	18876	2	1	117	C
APR 30,83	APR 29,83	530 900	2300 900	1	4.1	1	18877	2	1	68	CD
MAY 1,83	APR 30,83	900 1200	****	1	19.4	1	18878	2	1	98	
MAY 2,83	MAY 1,83	1200 530	****	1	16.2	1	18879	2	1	99	
MAY 3,83	MAY 2,83	530 530	530 1800	1	22.4	1	18880	2	1	83	C
MAY 4,83	MAY 3,83	530 530	****	1	5.8	1	18881	2	1	85	AC
MAY 5,83	MAY 4,83	530 530	2000 2300	1	3.7	1	18882	2	1	96	A
MAY 7,83	MAY 6,83	530 530	1600 1900	1	1.3	1	18883	2	1	69	
MAY 8,83	MAY 7,83	530 1130	1930 2215	1	17.3	1	18884	2	1	96	
MAY 15,83	MAY 14,83	530 1030	****	1	11.3	1	18885	2	1	99	C
MAY 20,83	MAY 19,83	530 530	1400 2100	1	33.6	1	18886	2	1	98	AC
MAY 23,83	MAY 22,83	800 1000	1030 1300	1	5.4	1	18887	2	1	91	
MAY 26,83	MAY 25,83	530 1130	****	1	6.8	1	18888	2	1	89	D
MAY 30,83	MAY 29,83	530 530	1300 1600	1	15.0	1	18889	2	1	103	
JUN 1,83	MAY 31,83	530 530	1300 1730	1	13.9	1	18890	2	1	97	
JUN 4,83	JUN 3,83	530 900	1630 100	1	7.7	1	18891	2	1	100	
JUN 5,83	JUN 4,83	900 930	****	1	3.0	1	18892	2	1	101	
JUN 7,83	JUN 6,83	530 530	600 1300	1	12.8	1	18893	2	1	102	HC
JUN 28,83	JUN 27,83	530 930	1500 830	1	31.5	1	18896	2	1	101	
JUL 1,83	JUN 30,83	530 930	****	1	3.1	1	18897	2	1	92	
JUL 5,83	JUL 4,83	530 530	1630 2100	1	25.8	1	18898	2	1	103	
JUL 18,83	JUL 17,83	530 530	1630 1830	1	12.1	1	18899	2	1	94	J
JUL 22,83	JUL 21,83	530 530	1515 1530	1	1.3	1	18900	2	1	49	N
JUL 29,83	JUL 28,83	530 530	2100 530	1	37.0	1	18902	2	1	105	J
JUL 30,83	JUL 29,83	530 530	530 1000	1	7.6	1	18903	2	1	88	J
JUL 31,83	JUL 30,83	830 1130	200 600	1	20.5	1	18904	2	1	103	JM
AUG 1,83	JUL 31,83	1130 1130	300 530	1	8.2	1	18905	2	1	97	
AUG 4,83	AUG 3,83	530 530	2300 530	1	9.8	1	18906	2	1	99	M
AUG 5,83	AUG 4,83	530 800	530 1900	1	2.6	1	18907	2	1	88	
AUG 12,83	AUG 11,83	530 530	100 400	1	19.3	1	18908	2	1	246	ACP
AUG 18,83	AUG 17,83	530 530	1630 1730	1	1.1	1	18912	2	1	69	NY6
AUG 22,83	AUG 21,83	530 530	300 530	1	17.0	1	18913	2	1	35	NJ
AUG 23,83	AUG 22,83	530 530	530 700	1	1.2	1	18911	2	1	36	N
AUG 31,83	AUG 30,83	530 530	800 930	1	23.8	1	18915	2	1	94	JC
SEP 7,83	SEP 6,83	530 530	800 930	1	10.5	1	18916	2	1	90	J
SEP 10,83	SEP 9,83	530 530	2330 220	1	5.9	1	18917	2	1	89	J
SEP 16,83	SEP 15,83	530 530	100 530	1	2.0	1	18909	2	1	38	N
SEP 17,83	SEP 16,83	530 830	530 900	1	23.1	1	18922	2	1	97	T

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEN #04

PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 16,83	APR 17,83	149.0	*****	*****	4.67	0.1330	1.15	0.46
APR 27,83	APR 26,83	82.0	*****	*****	4.41	*****	5.55	0.70
APR 29,83	APR 28,83	773.0	29.9	4.33	4.41	0.0688	3.40	0.54
APR 30,83	APR 29,83	179.0	*****	4.35	4.47	0.1870	3.45	0.53
MAY 1,83	APR 30,83	1219.0	18.4	4.25	4.58	0.0508	1.65	0.19
MAY 2,83	MAY 1,83	1036.0	19.8	4.45	4.38	0.0646	2.10	0.22
MAY 3,83	MAY 2,83	1204.0	21.6	4.45	4.56	0.0508	2.80	0.40
MAY 4,83	MAY 3,83	317.0	21.4	4.36	4.40	0.0624	2.50	0.16
MAY 5,83	MAY 4,83	228.0	*****	4.50	4.54	0.0618	3.30	1.19
MAY 7,83	MAY 6,83	58.0	*****	4.54	6.33	0.0268	8.55	0.96
MAY 8,83	MAY 7,83	1073.0	18.9	4.54	4.73	0.0458	2.70	0.27
MAY 15,83	MAY 14,83	723.0	18.0	4.54	4.91	0.0392	2.80	0.30
MAY 20,83	MAY 19,83	2124.0	14.9	4.40	4.63	0.0454	1.60	0.10
MAY 23,83	MAY 22,83	317.0	38.5	3.94	4.13	0.1068	3.10	0.31
MAY 26,83	MAY 25,83	389.0	37.1	4.00	4.20	0.0910	3.55	0.50
MAY 30,83	MAY 29,83	993.0	32.1	4.29	4.28	0.0804	2.90	0.39
JUN 1,83	MAY 31,83	872.0	15.4	4.59	4.73	0.0410	1.70	0.21
JUN 4,83	JUN 3,83	494.0	43.7	3.96	4.08	0.1282	3.75	0.49
JUN 5,83	JUN 4,83	196.0	34.0	4.11	4.22	0.0962	3.05	0.36
JUN 7,83	JUN 6,83	844.0	4.8	5.05	5.58	0.0242	0.45	0.06
JUN 26,83	JUN 27,83	2057.0	*****	*****	*****	*****	*****	*****
JUL 1,83	JUN 30,83	183.0	*****	3.91	4.01	0.1320	4.80	0.60
JUL 5,83	JUL 4,83	1718.0	13.8	4.53	4.77	0.0396	1.90	0.18
JUL 18,83	JUL 17,83	735.0	19.4	4.36	4.94	0.0380	2.95	0.41
JUL 22,83	JUL 21,83	41.0	*****	*****	7.21	0.0200	3.35	0.78
JUL 29,83	JUL 28,83	2493.0	35.0	3.91	4.40	0.0802	4.10	0.45
JUL 30,83	JUL 29,83	432.0	26.7	4.03	4.50	0.0650	2.70	0.47
JUL 31,83	JUL 30,83	1360.0	24.2	3.92	4.45	0.0670	2.15	0.22
AUG 1,83	JUL 31,83	512.0	38.8	3.92	4.31	0.0902	4.10	0.50
AUG 4,83	AUG 3,83	628.0	40.5	3.84	4.25	0.0980	3.50	0.52
AUG 5,83	AUG 4,83	148.0	60.0	*****	4.17	0.1312	6.85	0.83
AUG 12,83	AUG 6,83	3050.0	30.0	3.97	4.37	0.0786	2.60	0.34
AUG 16,83	AUG 17,83	49.0	*****	*****	3.60	0.3440	U 17.20	1.96
AUG 22,83	AUG 21,83	389.0	26.8	3.88	4.37	0.0704	2.90	0.38
AUG 23,83	AUG 22,83	28.0	*****	*****	4.04	0.1404	7.30	1.50
AUG 31,83	AUG 30,83	1438.0	18.2	4.33	4.88	0.0376	1.55	0.29
SEP 7,83	SEP 6,83	609.0	35.5	3.69	4.23	0.0924	4.20	0.34
SEP 10,83	SEP 9,83	340.0	24.5	4.15	4.81	0.0444	3.75	0.69
SEP 16,83	SEP 15,83	49.0	*****	*****	3.88	0.1854	D 6.50	1.90
SEP 17,83	SEP 16,83	1449.0	31.0	3.91	4.24	0.0558	2.95	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM				804	PAGE : 6			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 18,83	APR 17,83	0.19	0.03	0.040	0.020	0.035	0.356	0.0214
APR 27,83	APR 26,83	3.25	0.25	0.555	0.100	0.115	*****	*****
APR 29,83	APR 28,83	0.43	0.12	0.100	0.020	0.065	0.590	0.0389
APR 30,83	APR 29,83	0.50	0.13	0.120	0.035	0.245	0.570	0.0339
MAY 1,83	APR 30,83	0.02	0.02	0.020	0.010	0.030	0.224	0.0263
MAY 2,83	MAY 1,83	0.11	0.05	0.020	0.035	0.030	0.180	0.0417
MAY 3,83	MAY 2,83	0.48	0.20	0.075	0.070	0.125	0.490	0.0275
MAY 4,83	MAY 3,83	0.14	0.03	0.025	0.030	0.015	0.258	0.0398
MAY 5,83	MAY 4,83	0.91	0.24	0.175	0.055	0.075	0.950	0.0288
MAY 7,83	MAY 6,83	2.00	0.45	0.505	0.085	0.135	*****	U 0.0005
MAY 8,83	MAY 7,83	0.35	0.13	0.065	0.035	0.085	0.440	0.0186
MAY 15,83	MAY 14,83	0.37	0.13	0.085	0.045	0.055	0.710	0.0123
MAY 20,83	MAY 19,83	0.08	0.05	0.020	0.015	0.040	0.240	0.0234
MAY 23,83	MAY 22,83	0.09	0.21	0.030	0.030	0.040	0.156	0.0741
MAY 26,83	MAY 25,83	0.30	0.12	0.050	0.025	0.030	0.570	0.0631
MAY 30,83	MAY 29,83	0.28	0.11	0.065	0.035	0.040	0.330	0.0525
JUN 1,83	MAY 31,83	0.25	0.07	0.035	0.020	0.030	0.350	0.0186
JUN 4,83	JUN 3,83	0.21	0.12	0.050	0.060	0.095	0.260	0.0832
JUN 5,83	JUN 4,83	0.16	0.13	0.040	<T 0.010	0.045	0.284	0.0603
JUN 7,83	JUN 6,83	0.10	0.05	0.025	<T 0.010	0.030	0.160	0.0026
JUN 28,83	JUN 27,83	*****	*****	*****	*****	*****	*****	G 0.0026
JUL 1,83	JUN 30,83	0.44	0.22	0.080	0.020	0.040	0.066	0.0977
JUL 5,83	JUL 4,83	0.22	0.14	0.040	0.025	0.065	0.230	0.0170
JUL 18,83	JUL 17,83	0.68	0.20	0.135	0.035	0.055	0.480	0.0115
JUL 22,83	JUL 21,83	*****	0.60	*****	*****	*****	*****	U 0.0001
JUL 29,83	JUL 28,83	0.48	0.17	0.080	0.025	0.055	0.390	0.0398
JUL 30,83	JUL 29,83	0.57	0.21	0.080	0.040	0.090	0.194	0.0316
JUL 31,83	JUL 30,83	0.08	0.09	0.005	<W 0.005	0.005	0.094	0.0355
AUG 1,83	JUL 31,83	0.14	0.14	0.035	0.020	0.010	0.700	0.0490
AUG 4,83	AUG 3,83	0.25	0.16	0.040	0.020	0.015	0.230	0.0562
AUG 5,83	AUG 4,83	0.39	0.20	0.090	0.035	0.030	1.190	0.0676
AUG 12,83	AUG 6,83	0.15	0.14	0.025	<W 0.005	0.010	0.214	0.0427
AUG 18,83	AUG 17,83	*****	0.39	*****	*****	*****	0.880	0.2512
AUG 22,83	AUG 21,83	0.24	0.10	0.025	0.015	0.050	0.288	0.0427
AUG 23,83	AUG 22,83	*****	0.30	*****	*****	*****	*****	0.0912
AUG 31,83	AUG 30,83	0.19	0.06	0.030	0.020	0.030	0.400	0.0132
SEP 7,83	SEP 6,83	0.20	0.08	0.025	0.030	0.035	0.420	0.0589
SEP 10,83	SEP 9,83	0.86	0.22	0.195	0.060	0.135	0.650	0.0155
SEP 16,83	SEP 15,83	*****	0.66	*****	*****	*****	0.610	0.1318
SEP 17,83	SEP 16,83	0.06	0.08	0.010	0.030	<T 0.005	0.344	0.0575

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM 804										PAGE : 7	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
SEP 18,83	SEP 17,83	830 1200	830 1000	1	16.8	1	18921	2	1	98	
SEP 21,83	SEP 20,83	530 530	530 530	1	21.4	1	18920	2	1	99	JC
SEP 23,83	SEP 22,83	530 530	530 1000	1	16.3	1	18919	2	1	90	JHCH
SEP 24,83	SEP 23,83	530 530	530 530	1	7.2	1	18918	2	1	86	N
SEP 26,83	SEP 25,83	530 530	530 530	1	1.3	1	18930	2	1	45	
OCT 5,83	OCT 4,83	530 530	700 800	1	1.6	1	18929	2	1	96	H
OCT 6,83	OCT 5,83	530 530	1100 1300	1	4.6	1	18928	2	1	92	JH
OCT 7,83	OCT 6,83	530 530	530 530	1	5.7	1	18927	2	1	87	
OCT 9,83	OCT 8,83	530 530	1900 300	1	8.4	1	18926	2	1	85	
OCT 12,83	OCT 11,83	530 530	200 530	1	3.6	1	18925	2	1	84	
OCT 13,83	OCT 12,83	530 530	530 1500	1	15.3	1	18924	2	1	92	
OCT 14,83	OCT 13,83	530 530	530 1630	1	15.0	1	18923	2	1	117	
OCT 15,83	OCT 14,83	530 530	530 530	1	1.3	1	18931	2	1	51	C
OCT 17,83	OCT 16,83	1130 530	2130 200	1	2.1	1	18932	2	1	92	
OCT 23,83	OCT 22,83	530 1200	1300 200	1	22.6	1	18933	2	1	95	JHM
OCT 26,83	OCT 25,83	530 530	1200 1500	1	1.8	1	18934	2	1	57	
NOV 2,83	NOV 1,83	530 530	100 530	1	5.5	1	18935	2	1	94	J
NOV 3,83	NOV 2,83	530 530	1300 2200	1	7.4	1	18936	2	1	94	J
NOV 11,83	NOV 10,83	530 830	2200 830	1	13.3	2	18938	2	1	95	J
NOV 12,83	NOV 11,83	830 1100	530 830	1	2.2	2	18939	2	1	65	HM
NOV 16,83	NOV 15,83	530 530	530 530	3	7.6	2	18940	2	1	86	J
NOV 17,83	NOV 16,83	530 530	1100 1500	3	2.3	2	18941	2	1	57	HM
NOV 20,83	NOV 19,83	530 1200	530 530	1	1.9	2	18942	2	1	62	CD
NOV 22,83	NOV 21,83	1200 530	1200 1700	1	4.3	2	18943	2	1	113	C
NOV 24,83	NOV 23,83	530 530	1100 1600	1	5.4	2	18944	2	1	97	C
NOV 28,83	NOV 27,83	1130 530	530 530	3	4.3	2	18947	2	1	87	JHM
NOV 29,83	NOV 28,83	530 530	530 1100	3	10.5	2	18948	2	1	97	JH
NOV 30,83	NOV 29,83	530 530	1530 530	2	2.7	2	18949	2	1	34	N
DEC 1,83	NOV 30,83	530 530	530 530	2	7.1	2	18950	2	1	22	NHM
DEC 2,83	DEC 1,83	530 530	530 530	2	1.2	2	18951	2	1	3	N
DEC 4,83	DEC 3,83	830 1145	200 1000	3	3.1	2	18952	2	1	76	
DEC 6,83	DEC 5,83	530 530	2200 530	3	12.9	2	18953	2	1	74	M
DEC 7,83	DEC 6,83	530 530	530 1630	3	51.9	2	18954	2	1	47	N
DEC 8,83	DEC 7,83	530 530	530 900	2	3.0	2	18955	2	1	7	N
DEC 12,83	DEC 11,83	530 530	1300 530	3	14.4	2	18956	2	1	88	
DEC 13,83	DEC 12,83	530 530	530 530	3	6.1	2	18957	2	1	70	CD
DEC 15,83	DEC 14,83	530 530	530 530	2	530	2	18958	2	1	***	
DEC 17,83	DEC 16,83	530 1000	2200 400	2	3.4	2	18959	2	1	21	D
DEC 18,83	DEC 17,83	1000 1130	2000 1000	2	2.1	2	18960	2	1	***	E
DEC 19,83	DEC 18,83	1130 530	530 530	2	1.9	2	18961	2	1	12	I

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 16,83	SEP 17,83	1060.0	53.9	3.66	4.02	0.1002	5.40	0.53
SEP 21,83	SEP 20,83	1360.0	13.3	4.26		0.0226	1.25	0.12
SEP 23,83	SEP 22,83	941.0	7.7	4.63	G	0.0142	0.70	0.12
SEP 24,83	SEP 23,83	399.0	2.5	4.98	U	0.0088	0.10	0.01
SEP 26,83	SEP 25,83	38.0	*****	*****		0.1540	7.05	1.00
OCT 5,83	OCT 4,83	99.0	27.5	*****	U	0.0190	5.90	0.94
OCT 6,83	OCT 5,83	274.0	8.0	4.64	G	0.0266	0.85	0.22
OCT 7,83	OCT 6,83	320.0	7.5	4.84	G	0.0250	1.20	0.14
OCT 9,83	OCT 8,83	462.0	18.0	4.46		0.0392	2.95	0.41
OCT 12,83	OCT 11,83	196.0	*****	4.29	4.41	0.0558	1.95	0.22
OCT 13,83	OCT 12,83	903.0	18.5	4.29	4.48	0.0564	2.00	0.25
OCT 14,83	OCT 13,83	1132.0	10.5	4.31	4.67	0.0408	1.30	0.13
OCT 15,83	OCT 14,83	43.0	*****	*****	4.30	0.0914	4.00	0.30
OCT 17,83	OCT 16,83	125.0	38.0	*****	4.15	0.1162	4.30	0.35
OCT 23,83	OCT 22,83	1377.0	16.0	3.71	4.67	0.2006	1.55	0.22
OCT 26,83	OCT 25,83	66.0	*****	*****	4.03	0.1452	4.20	0.73
NOV 2,83	NOV 1,83	334.0	45.9	3.49	4.11	0.1274	4.25	1.15
NOV 3,83	NOV 2,83	448.0	31.5	3.58	4.24	0.0970	3.60	0.40
NOV 11,83	NOV 10,83	813.0	16.3	3.40	4.59	0.0480	1.30	0.20
NOV 12,83	NOV 11,83	93.0	*****	*****	G	0.0152	0.45	0.01
NOV 16,83	NOV 15,83	420.0	21.3	3.29	4.40	0.0600	0.85	0.46
NOV 17,83	NOV 16,83	85.0	*****	*****	4.25	*****	2.05	0.57
NOV 20,83	NOV 19,83	76.0	*****	*****	4.24	0.0858	4.00	0.08
NOV 22,83	NOV 21,83	313.0	29.5	3.19	4.22	0.0830	2.80	0.45
NOV 24,83	NOV 23,83	337.0	28.8	3.20	4.20	0.0884	2.75	0.36
NOV 28,83	NOV 27,83	241.0	11.4	3.67	4.81	0.0356	1.00	0.16
NOV 29,83	NOV 28,83	654.0	23.5	3.31	4.33	0.0720	2.10	0.36
NOV 30,83	NOV 29,83	60.0	*****	*****	4.60	0.0444	1.50	0.42
DEC 1,83	NOV 30,83	104.0	8.5	*****	G	0.0138	0.80	0.38
DEC 2,83	DEC 1,83	3.0	*****	*****	*****	*****	*****	*****
DEC 4,83	DEC 3,83	152.0	11.2	*****	4.68	0.0400	1.10	0.10
DEC 6,83	DEC 5,83	615.0	8.5	*****	4.98	0.0296	0.70	0.14
DEC 7,83	DEC 6,83	1566.0	16.5	*****	4.48	0.0522	1.75	0.10
DEC 8,83	DEC 7,83	14.0	*****	*****	U	0.0148	*****	*****
DEC 12,83	DEC 11,83	813.0	34.4	*****	4.16	0.0976	2.90	0.57
DEC 13,83	DEC 12,83	276.0	21.9	*****	4.37	0.0646	1.70	0.42
DEC 15,83	DEC 14,83	116.0	47.6	*****	4.06	0.1340	4.45	0.82
DEC 17,83	DEC 16,83	46.0	*****	*****	G	0.0152	1.00	0.49
DEC 18,83	DEC 17,83	*****	*****	*****	5.95	*****	*****	*****
DEC 19,83	DEC 18,83	15.0	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM										#04	PAGE : 9	
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L				
SEP 16,83	SEP 17,83	0.26	0.13	0.020	0.025	0.030	0.460	0.0955				
SEP 21,83	SEP 20,83	0.14	<T	0.010	<T	<W	0.148	0.0191	D			
SEP 23,83	SEP 22,83	0.16	0.03	0.020	<W	0.005	0.206	0.0025	G			
SEP 24,83	SEP 23,83	0.08	<W	<W	<W	<W	0.062	0.0002	U			
SEP 26,83	SEP 25,83	0.08	0.26	0.005	0.005	0.005	0.1148	0.1148				
OCT 5,83	OCT 4,83	2.70	0.32	0.700	0.185	0.120	0.0001	0.0001	U			
OCT 6,83	OCT 5,83	0.08	<W	0.005	<T	<T	0.380	0.0066	G			
OCT 7,83	OCT 6,83	0.08	<W	0.005	0.020	<T	0.480	0.0029	G			
OCT 9,83	OCT 8,83	0.76	0.05	0.075	0.050	0.025	0.430	0.0200				
OCT 12,83	OCT 11,83	0.08	0.07	<T	<T	0.070	0.226	0.0389				
OCT 13,83	OCT 12,83	0.05	0.05	0.005	<T	0.020	0.280	0.0331				
OCT 14,83	OCT 13,83	0.09	0.02	0.005	<T	0.010	0.158	0.0214				
OCT 15,83	OCT 14,83	0.08	0.30	0.005	0.005	0.005	0.0501	0.0501				
OCT 17,83	OCT 16,83	0.36	0.19	0.070	<T	0.060	0.044	0.0708				
OCT 23,83	OCT 22,83	0.08	0.20	0.020	0.015	0.035	0.156	0.0214				
OCT 26,83	OCT 25,83	0.08	0.28	0.005	0.005	0.005	0.005	0.0933				
NOV 2,83	NOV 1,83	0.31	0.07	0.055	0.090	0.105	0.700	0.0776				
NOV 3,83	NOV 2,83	0.09	<W	0.015	0.040	0.085	0.348	0.0575				
NOV 11,83	NOV 10,83	0.04	0.08	0.010	<T	<T	0.144	0.0257				
NOV 12,83	NOV 11,83	0.06	0.05	0.010	<W	0.060	0.102	0.0003	G			
NOV 16,83	NOV 15,83	0.05	0.10	0.005	<W	<T	0.074	0.0398				
NOV 17,83	NOV 16,83	0.14	0.29	0.025	U	U	0.710	0.0562				
NOV 20,83	NOV 19,83	0.65	0.34	0.090	0.025	0.170	0.054	0.0575				
NOV 22,83	NOV 21,83	0.22	0.27	0.025	0.020	0.175	0.168	0.0603				
NOV 24,83	NOV 23,83	0.31	0.23	0.035	<T	0.095	0.092	0.0631				
NOV 28,83	NOV 27,83	0.01	0.05	0.015	<T	0.005	0.034	0.0155				
NOV 29,83	NOV 28,83	<W	0.10	0.010	<T	<T	0.136	0.0468				
NOV 30,83	NOV 29,83	0.01	0.14	0.005	0.005	0.005	0.0251	0.0251				
DEC 1,83	NOV 30,83	0.67	0.15	0.150	<T	0.035	0.010	0.0002	G			
DEC 2,83	DEC 1,83	0.08	0.06	0.015	0.005	0.015	0.002	0.0209				
DEC 4,83	DEC 3,83	0.09	0.06	0.015	<W	0.015	<W	0.0105				
DEC 6,83	DEC 5,83	0.03	0.05	0.005	<T	0.020	0.100	0.0331				
DEC 7,83	DEC 6,83	0.02	0.04	0.005	<T	0.010	0.058	0.0001	U			
DEC 8,83	DEC 7,83	0.08	0.08	0.010	0.005	0.030	0.262	0.0692				
DEC 12,83	DEC 11,83	0.06	0.25	0.010	<T	0.030	0.102	0.0427				
DEC 13,83	DEC 12,83	0.11	0.08	0.015	0.030	0.025	0.640	0.0871				
DEC 15,83	DEC 14,83	0.13	0.35	0.020	0.005	0.005	0.0011	0.0011	G			
DEC 17,83	DEC 16,83	0.08	0.22	0.005	0.005	0.005	0.005	0.005				
DEC 18,83	DEC 17,83	0.08	0.22	0.005	0.005	0.005	0.005	0.005				
DEC 19,83	DEC 18,83	0.08	0.22	0.005	0.005	0.005	0.005	0.005				

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04										PAGE : 10	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-HOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES	(%)	
				03-COMP/04-OTHER							
DEC 22,83	DEC 21,83	530 1200	****	3	23.1	2	18962	2	1	59	C
DEC 24,83	DEC 23,83	530 1200	****	2	2.1	2	18963	2	1	***	EIK
DEC 25,83	DEC 24,83	1200 1400	****	2	14.5	2	18964	2	1	39	C
DEC 26,83	DEC 25,83	1400 1000	1400 2000	2	10.7	2	18965	2	1	4	I
DEC 29,83	DEC 28,83	530 530	****	2	13.9	2	18966	2	1	49	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 22,83	DEC 21,83	880.0	23.5	*****	4.37	0.0654	1.65	0.41
DEC 24,83	DEC 23,83	*****	*****	*****	*****	*****	*****	*****
DEC 25,83	DEC 24,83	368.0	4.8	*****	G 5.58	0.0172	0.20	0.05
DEC 26,83	DEC 25,83	29.0	*****	*****	G 5.84	0.0160	*****	*****
DEC 29,83	DEC 28,83	442.0	12.9	*****	4.63	0.0434	0.35	0.36

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM				#04	PAGE : 12			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 22,83	DEC 21,83	0.07	0.11	0.020	<M 0.005	0.070	0.100	0.0427
DEC 24,83	DEC 23,83	*****	*****	*****	*****	*****	*****	*****
DEC 25,83	DEC 24,83	0.06	0.18	0.025	<M 0.005	0.135	0.048	G 0.0026
DEC 26,83	DEC 25,83	*****	*****	*****	*****	*****	*****	G 0.0014
DEC 29,83	DEC 28,83	0.05	0.08	0.015	<M 0.005	0.025	0.088	0.0234

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEN #06												PAGE : 1				
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE					
												01-STD. 02-NIPHER	02-APIOS 03-SPECIAL	01-MOE 03-AES		
JAN 4,83	JAN 3,83	750 750	830 1600	2	1.3	2	28519	2	1	17	N					
JAN 6,83	JAN 5,83	830 830	830 1800	2	2.2	2	28520	2	1	2	E					
JAN 7,83	JAN 6,83	830 830	900 1800	2	5.1	2	28521	2	1	108	N					
JAN 8,83	JAN 7,83	830 755	755 1315	2	11.5	2	28522	2	1	68						
JAN 11,83	JAN 10,83	755 755	1015 200	3	3.2	2	28523	2	1	108						
JAN 12,83	JAN 11,83	755 755	830 2200	2	1.1	2	28524	2	1	108						
JAN 14,83	JAN 13,83	800 800	900 1100	2	3.5	2	28525	2	1	108						
JAN 16,83	JAN 15,83	800 1015	900 1100	2	2.2	2	28526	2	1	108						
JAN 23,83	JAN 22,83	755 755	200 800	2	5.3	2	28527	2	1	108						
JAN 24,83	JAN 23,83	755 755	2000 755	2	4.3	2	28528	2	1	108						
JAN 25,83	JAN 24,83	755 750	755 750	3	4.2	2	28529	2	1	108						
JAN 27,83	JAN 26,83	750 750	915 2000	2	5.1	2	28530	2	1	108						
JAN 31,83	JAN 30,83	755 755	1300 755	2	0.5	2	28531	2	1	108						
FEB 1,83	JAN 31,83	755 750	755 1400	2	16.4	2	28532	2	1	108						
FEB 3,83	FEB 2,83	750 700	800 700	1	7.4	2	28533	2	1	108						
FEB 4,83	FEB 3,83	750 750	830 2200	3	2.1	2	28534	2	1	108						
FEB 7,83	FEB 6,83	750 750	300 750	2	0.3	2	28535	2	1	108						
FEB 8,83	FEB 7,83	750 755	750 1400	2	0.4	2	28536	2	1	108						
FEB 10,83	FEB 9,83	755 755	830 1100	1	8.2	2	28537	2	1	108						
FEB 23,83	FEB 22,83	750 750	1600 300	3	2.5	2	28538	2	1	108						
MAR 4,83	MAR 3,83	750 750	2300 2345	3	10.3	2	28539	2	1	108						
MAR 5,83	MAR 4,83	750 750	1430 1800	1	0.3	2	28540	2	1	108						
MAR 7,83	MAR 6,83	755 755	1700 2300	1	0.5	2	28541	2	1	108						
MAR 9,83	MAR 8,83	755 755	2200 755	1	3.5	2	28542	2	1	108						
MAR 10,83	MAR 9,83	755 755	755 755	1	6.5	2	28543	2	1	108						
MAR 19,83	MAR 18,83	900 900	1815 900	1	6.1	2	28544	2	1	108						
MAR 20,83	MAR 19,83	900 830	900 2300	1	12.5	2	28545	2	1	108						
MAR 22,83	MAR 21,83	755 755	815 700	2	7.4	2	28546	2	1	108						
MAR 26,83	MAR 25,83	750 750	830 700	2	2.2	2	28547	2	1	108						
MAR 29,83	MAR 28,83	750 730	845 1800	3	12.5	2	28548	2	1	108						
APR 3,83	APR 2,83	1015 1015	2230 400	3	5.4	2	28549	2	1	108						
APR 4,83	APR 3,83	1015 830	1015 700	1	0.4	2	28550	2	1	108						
APR 5,83	APR 4,83	830 755	1000 1800	2	5.3	2	28551	2	1	108						
APR 7,83	APR 6,83	755 755	2200 755	1	18.3	2	28552	2	1	108						
APR 8,83	APR 7,83	755 755	755 1145	1	0.3	2	28553	2	1	108						
APR 10,83	APR 9,83	1100 1100	2000 1000	1	1.1	2	28554	2	1	108						
APR 11,83	APR 10,83	1100 755	500 700	2	2.3	2	28555	2	1	108						
APR 12,83	APR 11,83	755 750	1700 2300	1	7.3	2	28556	2	1	108						
APR 14,83	APR 13,83	750 750	2300 750	1		2	28557	2	1	108						
APR 15,83	APR 14,83	750 750	755 530	1		2	28558	2	1	108						

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEIN #06

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. µMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH6.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 4,83	JAN 3,83	15.0	*****	*****	*****	*****	*****	*****
JAN 6,83	JAN 5,83	3.0	*****	*****	*****	*****	*****	*****
JAN 7,83	JAN 6,83	*****	*****	*****	*****	*****	*****	*****
JAN 8,83	JAN 7,83	*****	*****	*****	*****	*****	*****	*****
JAN 11,83	JAN 10,83	799.0	23.5	4.20	4.47	0.0618	1.60	0.45
JAN 12,83	JAN 11,83	141.0	25.0	*****	4.24	0.0778	1.40	0.63
JAN 14,83	JAN 13,83	*****	*****	*****	*****	*****	*****	*****
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****
JAN 23,83	JAN 22,83	*****	*****	*****	*****	*****	*****	*****
JAN 24,83	JAN 23,83	322.0	35.5	4.13	*****	0.1066	1.65	0.80
JAN 25,83	JAN 24,83	176.0	33.5	4.11	4.09	0.1124	2.70	0.72
JAN 27,83	JAN 25,83	121.0	19.2	*****	4.08	0.0572	2.15	0.26
JAN 31,83	JAN 30,83	437.0	47.0	3.94	4.49	0.1328	2.60	0.99
FEB 1,83	JAN 31,83	*****	*****	*****	4.03	*****	*****	*****
FEB 3,83	FEB 2,83	547.0	43.5	4.05	4.00	0.1296	2.70	0.75
FEB 4,83	FEB 3,83	395.0	28.6	4.24	4.13	0.0978	1.95	0.50
FEB 7,83	FEB 6,83	*****	*****	*****	*****	*****	*****	*****
FEB 8,83	FEB 7,83	*****	*****	*****	*****	*****	*****	*****
FEB 18,83	FEB 17,83	46.0	42.2	4.01	3.30	0.5420	11.20	6.20
FEB 23,83	FEB 22,83	486.0	46.5	*****	4.05	0.1064	3.35	0.68
MAR 4,83	MAR 3,83	147.0	24.8	4.22	4.17	0.0976	3.90	1.01
MAR 5,83	MAR 4,83	218.0	*****	4.22	4.36	0.0650	2.20	0.37
MAR 7,83	MAR 6,83	36.0	*****	4.72	4.72	0.0394	2.50	0.27
MAR 9,83	MAR 8,83	28.0	*****	*****	*****	*****	4.30	1.11
MAR 10,83	MAR 9,83	116.0	88.5	4.50	3.71	0.2220	6.35	1.14
MAR 19,83	MAR 18,83	416.0	*****	4.70	4.46	0.0564	1.30	0.32
MAR 20,83	MAR 19,83	355.0	*****	4.83	4.83	0.0330	0.45	0.10
MAR 22,83	MAR 21,83	445.0	25.9	4.83	4.02	0.1214	0.55	0.05
MAR 28,83	MAR 27,83	316.0	*****	4.24	3.39	0.0684	1.75	0.40
MAR 29,83	MAR 28,83	63.0	*****	4.60	4.22	0.1276	2.50	0.88
APR 3,83	APR 2,83	732.0	11.2	4.26	4.77	0.0360	0.70	0.23
APR 4,83	APR 3,83	340.0	25.2	4.26	4.39	0.0648	1.75	0.44
APR 5,83	APR 4,83	*****	*****	*****	*****	*****	*****	*****
APR 7,83	APR 6,83	38.0	*****	*****	4.03	0.1380	4.80	0.53
APR 8,83	APR 7,83	299.0	50.0	3.96	4.01	0.1306	4.50	0.62
APR 10,83	APR 9,83	1224.0	20.6	4.29	4.45	0.0556	1.50	0.29
APR 11,83	APR 10,83	*****	*****	*****	*****	*****	*****	*****
APR 12,83	APR 11,83	72.0	*****	*****	3.99	0.1402	5.20	0.56
APR 14,83	APR 13,83	164.0	76.0	*****	3.86	0.1802	7.60	0.84
APR 15,83	APR 14,83	536.0	26.2	4.23	4.37	0.0658	2.15	0.37

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06										PAGE : 3	
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L			
JAN 4,83	JAN 3,83	*****	*****	*****	*****	*****	*****	*****			
JAN 6,83	JAN 5,83	*****	*****	*****	*****	*****	*****	*****			
JAN 7,83	JAN 6,83	*****	*****	*****	*****	*****	*****	*****			
JAN 8,83	JAN 7,83	*****	*****	*****	*****	*****	*****	*****			
JAN 11,83	JAN 10,83	0.13	0.11	0.005	<T 0.005	0.020	0.148	0.0339			
JAN 12,83	JAN 11,83	0.14	0.17	0.015	0.030	0.090	0.214	0.0575			
JAN 14,83	JAN 13,83	*****	*****	*****	*****	*****	*****	*****			
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****			
JAN 23,83	JAN 22,83	*****	*****	*****	*****	*****	*****	*****			
JAN 24,83	JAN 23,83	0.05	0.14	<W 0.005	0.015	0.035	0.122	0.0813			
JAN 25,83	JAN 24,83	*****	0.12	*****	0.030	0.040	0.290	0.0832			
JAN 27,83	JAN 25,83	*****	0.11	*****	0.030	0.050	0.490	0.0324			
JAN 31,83	JAN 30,83	0.07	0.22	<W 0.005	0.030	0.035	0.348	0.0933			
FEB 1,83	JAN 31,83	*****	*****	*****	*****	*****	*****	*****			
FEB 3,83	FEB 2,83	0.06	0.16	<W 0.005	0.035	0.060	0.130	0.1000			
FEB 4,83	FEB 3,83	0.08	0.05	<W 0.005	0.025	0.020	0.218	0.0741			
FEB 7,83	FEB 6,83	*****	*****	*****	*****	*****	*****	*****			
FEB 8,83	FEB 7,83	*****	*****	*****	*****	*****	*****	*****			
FEB 18,83	FEB 17,83	*****	G 1.37	*****	*****	*****	*****	0.5012			
FEB 23,83	FEB 22,83	0.12	0.16	0.015	0.025	0.045	0.540	0.0891			
MAR 4,83	MAR 3,83	0.30	0.21	0.040	0.040	0.100	*****	0.0676			
MAR 5,83	MAR 4,83	0.21	0.12	0.020	0.030	0.050	0.068	0.0437			
MAR 7,83	MAR 6,83	*****	0.35	*****	*****	*****	*****	0.0191			
MAR 9,83	MAR 8,83	*****	0.25	*****	*****	*****	*****	*****			
MAR 10,83	MAR 9,83	0.10	0.13	0.010	0.020	0.350	0.230	0.1950			
MAR 19,83	MAR 18,83	0.13	0.10	0.015	0.015	0.060	0.178	0.0347			
MAR 20,83	MAR 19,83	0.13	0.04	<W 0.005	0.005	0.025	0.014	0.0148			
MAR 22,83	MAR 21,83	0.14	0.03	<T 0.005	0.010	0.015	0.002	0.0955			
MAR 28,83	MAR 27,83	0.07	0.06	<W 0.005	0.015	0.015	0.098	0.4074			
MAR 29,83	MAR 28,83	*****	0.16	*****	*****	*****	*****	0.0603			
APR 3,83	APR 2,83	0.11	0.05	0.020	0.020	0.020	0.072	0.0170			
APR 4,83	APR 3,83	0.17	0.06	0.020	0.030	0.040	0.190	0.0407			
APR 5,83	APR 4,83	*****	*****	*****	*****	*****	*****	*****			
APR 7,83	APR 6,83	*****	0.15	*****	*****	*****	*****	0.0933			
APR 8,83	APR 7,83	0.20	0.08	0.020	0.030	0.010	0.320	0.0977			
APR 10,83	APR 9,83	0.08	0.04	0.010	0.020	0.010	0.088	0.0355			
APR 11,83	APR 10,83	*****	*****	*****	*****	*****	*****	*****			
APR 12,83	APR 11,83	0.29	0.09	0.005	0.095	0.030	0.720	0.1380			
APR 14,83	APR 13,83	0.30	0.18	0.030	0.050	0.070	0.112	0.0427			
APR 15,83	APR 14,83	0.24	0.14	0.030	0.020	0.060					

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEN #06

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(HH)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS
				01-RAIN	01-STD.	02-NIPHER		02-APIOS	01-MOE		FIELD OFFICE
				02-SIOM	02-NIPHER			03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
APR 20,83	APR 19,83	630	2300	2	2.2	2	28560	2	1	92	
APR 21,83	APR 20,83	630	1900	2	3.0	2	28561	2	1	61	HM
APR 29,83	APR 28,83	755	1800	1	3.0	2	28562	2	1	109	
MAY 1,83	APR 30,83	800	2000	1	21.0	1	28563	2	1	33	N
MAY 2,83	MAY 1,83	1000	750	1	20.0	1	28564	2	1	***	EG
MAY 3,83	MAY 2,83	750	1400	1	55.0	1	28565	2	1	58	
MAY 4,83	MAY 3,83	755	1700	1	8.0	1	28566	2	1	72	
MAY 7,83	MAY 6,83	1000	200	1	2.0	1	28567	2	1	98	
MAY 8,83	MAY 7,83	1000	1015	1	27.2	1	28568	2	1	109	H
MAY 15,83	MAY 14,83	1030	1030	1	15.0	1	28569	2	1	103	
MAY 20,83	MAY 19,83	750	1530	1	18.0	1	28570	2	1	98	
MAY 21,83	MAY 20,83	750	920	1	2.0	1	28571	2	1	88	
MAY 23,83	MAY 22,83	910	1600	1	13.4	1	28572	2	1	69	J
MAY 26,83	MAY 25,83	750	1500	1	12.3	1	28573	2	1	57	
MAY 30,83	MAY 29,83	800	1900	1	3.2	1	28574	2	1	82	H
JUN 1,83	MAY 31,83	800	1635	1	5.0	1	28575	2	1	102	
JUN 6,83	JUN 5,83	755	800	1	0.4	1	28576	2	1	58	
JUN 8,83	JUN 7,83	755	1400	1	6.1	1	28577	2	1	92	Y2
JUN 10,83	JUN 9,83	755	2300	1	4.1	1	28578	2	1	93	
JUN 27,83	JUN 26,83	800	2100	1	6.0	1	28579	2	1	101	
JUN 28,83	JUN 27,83	800	900	1	3.2	1	28580	2	1	78	
JUL 2,83	JUL 1,83	800	1400	1	5.3	1	28581	2	1	96	
JUL 3,83	JUL 2,83	800	1045	1	2.4	1	28582	2	1	115	
JUL 5,83	JUL 4,83	800	755	1	7.1	1	28583	2	1	103	H
JUL 9,83	JUL 8,83	750	2045	1	1.1	1	28584	2	1	89	
JUL 25,83	JUL 24,83	800	1430	1	0.1	1	28585	2	1	187	N
JUL 29,83	JUL 28,83	800	800	1	3.0	1	28586	2	1	84	N
JUL 30,83	JUL 29,83	800	800	1	29.0	1	28587	2	1	23	
AUG 1,83	JUL 31,83	800	800	1	6.1	1	28588	2	1	102	
AUG 2,83	AUG 1,83	800	800	1	12.0	1	28589	2	1	60	
AUG 4,83	AUG 3,83	750	2200	1	0.4	1	28590	2	1	101	
AUG 9,83	AUG 8,83	750	1430	1	12.1	1	28591	2	1	55	
AUG 12,83	AUG 11,83	755	815	1	1.1	1	28592	2	1	70	
AUG 20,83	AUG 19,83	830	1500	1	1.0	1	28593	2	1	68	
AUG 22,83	AUG 21,83	750	130	1	0.4	1	28594	2	1	70	
AUG 29,83	AUG 28,83	750	1515	1	23.4	1	28595	2	1	102	
AUG 30,83	AUG 29,83	750	1550	1	43.0	1	28596	2	1	110	JH
AUG 31,83	AUG 30,83	755	1330	1	29.1	1	28597	2	1	90	J
SEP 7,83	SEP 6,83	750	1030	1	0.3	1	28598	2	1	83	JC
							28599	2	1	52	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 20,83	APR 19,83	131.0	*****	*****	4.61	0.1462	1.40	0.15
APR 21,83	APR 20,83	118.0	*****	*****	G 5.67	*****	0.50	0.06
APR 29,83	APR 28,83	211.0	34.7	4.28	4.63	0.0534	4.25	0.71
MAY 1,83	APR 30,83	451.0	14.2	4.52	4.62	0.0458	1.20	0.14
MAY 2,83	MAY 1,83	*****	*****	*****	*****	*****	*****	*****
MAY 3,83	MAY 2,83	2048.0	16.3	4.50	4.60	0.0482	1.55	0.23
MAY 4,83	MAY 3,83	373.0	16.0	4.47	4.48	0.0550	1.30	0.12
MAY 7,83	MAY 6,83	126.0	*****	*****	U 4.62	0.0684	6.30	0.90
MAY 8,83	MAY 7,83	1917.0	16.5	4.45	4.67	0.0430	1.90	0.28
MAY 15,83	MAY 14,83	999.0	45.5	4.06	4.20	0.0984	4.95	0.48
MAY 20,83	MAY 19,83	1134.0	14.4	4.58	4.63	0.0422	1.10	0.17
MAY 21,83	MAY 20,83	114.0	*****	*****	4.15	0.1058	5.05	1.26
MAY 23,83	MAY 22,83	598.0	26.6	4.62	4.34	0.0702	2.50	0.25
MAY 26,83	MAY 25,83	450.0	37.9	4.15	4.23	0.0890	3.45	0.60
MAY 30,83	MAY 29,83	169.0	47.4	*****	4.11	0.1092	4.90	0.57
JUN 1,83	MAY 31,83	328.0	25.4	4.34	4.48	0.0630	2.75	0.47
JUN 6,83	JUN 5,83	15.0	*****	*****	3.74	G 0.2820	*****	*****
JUN 8,83	JUN 6,83	361.0	15.7	4.45	4.65	0.0494	1.65	0.11
JUN 10,83	JUN 9,83	246.0	112.0	3.77	3.86	0.2220	12.80	2.85
JUN 27,83	JUN 26,83	391.0	37.8	4.17	4.43	0.0762	6.25	0.81
JUN 28,83	JUN 27,83	162.0	19.0	4.33	4.57	0.0504	2.00	0.28
JUL 2,83	JUL 1,83	328.0	34.5	4.12	4.27	0.1584	4.00	0.72
JUL 3,83	JUL 2,83	178.0	10.1	4.57	4.90	0.0304	0.65	0.21
JUL 5,83	JUL 4,83	472.0	18.5	4.42	4.68	0.0428	2.85	0.25
JUL 9,83	JUL 8,83	63.0	*****	*****	3.99	0.1540	11.00	1.48
JUL 25,83	JUL 24,83	12.0	*****	*****	*****	*****	*****	*****
JUL 29,83	JUL 28,83	162.0	58.0	*****	4.05	0.1372	5.65	0.80
JUL 30,83	JUL 29,83	442.0	18.7	*****	4.63	0.0504	2.25	0.25
JUL 31,83	JUL 30,83	399.0	51.0	3.95	4.08	0.1268	4.95	0.53
AUG 1,83	JUL 31,83	464.0	34.0	4.15	4.07	0.1246	3.60	0.32
AUG 2,83	AUG 1,83	26.0	*****	*****	G 6.68	0.0206	*****	*****
AUG 4,83	AUG 3,83	430.0	45.0	3.99	4.12	0.1002	4.35	0.70
AUG 9,83	AUG 8,83	50.0	*****	*****	U 7.22	0.0196	2.60	0.53
AUG 12,83	AUG 11,83	44.0	*****	*****	4.33	0.0922	*****	*****
AUG 20,83	AUG 19,83	18.0	*****	*****	*****	*****	*****	*****
AUG 22,83	AUG 21,83	1531.0	15.8	4.35	4.65	0.0478	1.50	0.14
AUG 29,83	AUG 28,83	3042.0	7.6	4.60	5.20	0.0264	1.00	0.05
AUG 30,83	AUG 29,83	300.0	15.6	4.26	4.85	0.0400	1.75	0.31
AUG 31,83	AUG 30,83	1560.0	4.4	4.66	G 5.84	0.0208	0.40	0.09
SEP 7,83	SEP 6,83	10.0	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEN #06

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE LAB H+ MG/L
APR 20,83	APR 19,83	0.18	0.20	0.030	0.020	0.120	0.070	0.0245
APR 21,83	APR 20,83	0.14	0.06	0.010	<T	0.030	0.014	G 0.0021
APR 29,83	APR 28,83	G 1.09	0.21	0.110	0.070	0.075	0.720	0.0234
MAY 1,83	APR 30,83	0.08	0.02	0.010	0.015	<T 0.005	0.120	0.0240
MAY 2,83	MAY 1,83	*****	*****	*****	*****	*****	*****	*****
MAY 3,83	MAY 2,83	0.19	0.10	0.035	0.030	0.045	0.216	0.0251
MAY 4,83	MAY 3,83	0.12	0.02	0.015	0.035	0.030	0.050	0.0331
MAY 7,83	MAY 6,83	U 2.60	0.28	U 0.260	U 0.145	0.140	0.670	U 0.0240
MAY 8,83	MAY 7,83	0.34	0.06	0.050	0.025	0.050	0.236	0.0214
MAY 15,83	MAY 14,83	0.41	0.23	0.055	0.055	0.095	0.630	0.0631
MAY 20,83	MAY 19,83	0.10	0.02	0.015	0.015	0.010	0.130	0.0234
MAY 21,83	MAY 20,83	0.29	0.13	0.030	0.050	0.035	1.460	0.0708
MAY 23,83	MAY 22,83	0.11	0.05	0.015	0.030	0.020	0.270	0.0457
MAY 26,83	MAY 25,83	0.30	0.11	0.055	0.025	0.020	0.500	0.0589
MAY 30,83	MAY 29,83	0.54	0.16	0.055	0.035	0.050	0.500	0.0776
JUN 1,83	MAY 31,83	0.42	0.14	0.065	0.040	0.030	0.410	0.0331
JUN 6,83	JUN 5,83	*****	*****	*****	*****	*****	*****	0.1820
JUN 8,83	JUN 6,83	0.15	0.06	0.020	0.030	0.025	0.032	0.0224
JUN 10,83	JUN 9,83	G 2.85	0.70	G 0.555	0.120	0.090	1.490	0.1380
JUN 27,83	JUN 26,83	1.03	0.22	0.165	G 0.205	0.055	1.190	D 0.0372
JUN 28,83	JUN 27,83	*****	0.10	*****	*****	*****	*****	0.0269
JUL 2,83	JUL 1,83	0.50	0.15	0.070	0.065	0.040	0.760	0.0537
JUL 3,83	JUL 2,83	*****	0.08	*****	*****	*****	1.020	0.0126
JUL 5,83	JUL 4,83	0.51	0.16	0.090	0.050	0.100	0.460	0.0209
JUL 9,83	JUL 8,83	*****	0.46	*****	*****	*****	0.1023	0.1023
JUL 25,83	JUL 24,83	*****	*****	*****	*****	*****	*****	*****
JUL 29,83	JUL 28,83	0.85	0.39	0.095	0.105	0.175	0.220	0.0891
JUL 30,83	JUL 29,83	0.25	0.10	0.030	0.025	0.045	0.274	0.0234
JUL 31,83	JUL 30,83	0.09	0.18	0.020	0.040	0.040	0.560	0.0832
AUG 1,83	JUL 31,83	0.08	0.10	0.015	0.025	0.020	0.400	0.0851
AUG 2,83	AUG 1,83	*****	*****	*****	*****	*****	*****	G 0.0002
AUG 4,83	AUG 3,83	0.34	0.13	0.075	<W 0.005	0.025	0.570	0.0759
AUG 9,83	AUG 8,83	*****	0.47	*****	*****	*****	*****	U 0.0001
AUG 12,83	AUG 11,83	*****	*****	*****	*****	*****	*****	0.0468
AUG 20,83	AUG 19,83	*****	*****	*****	*****	*****	*****	*****
AUG 22,83	AUG 21,83	0.12	0.05	0.015	0.005	0.025	0.150	0.0224
AUG 29,83	AUG 28,83	0.26	0.06	0.015	0.025	0.015	0.162	0.0063
AUG 30,83	AUG 29,83	0.35	0.32	0.035	0.130	0.120	0.338	0.0141
AUG 31,83	AUG 30,83	0.13	0.09	0.015	0.055	0.035	0.140	G 0.0014
SEP 7,83	SEP 6,83	*****	*****	*****	*****	*****	*****	*****

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06										PAGE : 7	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
SEP 10,83	SEP 9,83	830	2100 2145	1	1.3	1	28600	2	1	112	
SEP 17,83	SEP 16,83	830	830	1	17.4	1	29700	2	1	98	
SEP 19,83	SEP 18,83	750	900 1800	1	11.2	1	29701	2	1	101	
SEP 21,83	SEP 20,83	830	750	1	11.1	1	29702	2	1	104	
SEP 22,83	SEP 21,83	750	750 1300	1	3.4	1	29703	2	1	97	HM
SEP 23,83	SEP 22,83	755	1315 1330	1	0.3	1	29704	2	1	77	
SEP 24,83	SEP 23,83	750	910	1	0.4	1	29705	2	1	132	N
SEP 26,83	SEP 25,83	830	750	1	4.2	1	29706	2	1	96	
SEP 28,83	SEP 27,83	750	810 900	1	0.3	1	29707	2	1	36	N
OCT 4,83	OCT 3,83	750	1645 200	1	10.0	1	29708	2	1	102	JH
OCT 5,83	OCT 4,83	750	900	1	19.2	1	29709	2	1	103	JHM
OCT 6,83	OCT 5,83	755	1150 730	1	8.0	1	29710	2	1	97	
OCT 8,83	OCT 7,83	910	100 910	1	7.0	1	29711	2	1	76	
OCT 9,83	OCT 8,83	910	1000 910	1	4.3	1	29712	2	1	97	
OCT 13,83	OCT 12,83	750	755	1	8.4	1	29713	2	1	98	
OCT 14,83	OCT 13,83	755	1720 730	1	24.0	1	29714	2	1	104	
OCT 15,83	OCT 14,83	750	850	1	4.1	1	29715	2	1	93	
OCT 23,83	OCT 22,83	800	1030 500 1000	1	7.1	1	29716	2	1	83	
OCT 24,83	OCT 23,83	1030	750 1030 1900	1	1.4	1	29717	2	1	39	
OCT 25,83	OCT 24,83	755	750	1	0.1	1	29718	2	1	***	N
OCT 26,83	OCT 25,83	755	755 1500 600	1	2.0	1	29719	2	1	39	N
NOV 2,83	OCT 26,83	755	750	1	4.1	1	29720	2	1	104	JZ
NOV 3,83	NOV 2,83	750	745	1	13.4	1	29721	2	1	54	
NOV 4,83	NOV 3,83	745	745 700	2	4.1	1	29722	2	1	47	N
NOV 5,83	NOV 4,83	750	830	2	***	2	29723	2	1	***	JCH
NOV 11,83	NOV 10,83	830	1700 730	2	7.3	2	29724	2	1	112	
NOV 12,83	NOV 11,83	830	845	3	17.5	2	29725	2	1	50	JHCM
NOV 16,83	NOV 15,83	755	1430 755	3	9.5	2	29726	2	1	102	JH
NOV 17,83	NOV 16,83	755	750 130	2	9.1	2	29727	2	1	84	M
NOV 19,83	NOV 18,83	845	2100 100	2	1.3	2	29728	2	1	103	
NOV 21,83	NOV 20,83	750	1600 200	1	8.4	2	29729	2	1	112	
NOV 24,83	NOV 23,83	750	1600 600	1	3.5	2	29730	2	1	116	
NOV 26,83	NOV 25,83	815	1700 2300	2	1.5	2	29731	2	1	79	
NOV 29,83	NOV 28,83	750	2130 100	3	5.5	2	29732	2	1	114	
NOV 30,83	NOV 29,83	750	745	2	2.3	2	29733	2	1	75	
DEC 1,83	NOV 30,83	745	755 815 1400	2	3.5	2	29734	2	1	67	HC
DEC 2,83	DEC 1,83	755	900 1900	2	1.1	2	29735	2	1	79	
DEC 3,83	DEC 2,83	750	1000	2	1.5	2	29736	2	1	221	N
DEC 5,83	DEC 4,83	830	1900 200	2	3.2	2	29737	2	1	113	
DEC 6,83	DEC 5,83	830	400 800	2	5.2	2	29738	2	1	81	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEN 806

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 10,83	SEP 9,83	94.0	27.5	*****	*****	*****	*****	*****
SEP 17,83	SEP 16,83	1103.0	41.5	*****	4.20	0.1064	3.35	0.50
SEP 19,83	SEP 18,83	732.0	28.4	4.20	4.32	0.0742	2.45	0.37
SEP 21,83	SEP 20,83	740.0	19.9	*****	4.45	0.0562	1.80	0.22
SEP 22,83	SEP 21,83	212.0	3.8	G 4.97	G 5.35	0.0204	0.30	0.03
SEP 23,83	SEP 22,83	15.0	*****	*****	U 7.08	0.0142	*****	*****
SEP 24,83	SEP 23,83	34.0	*****	*****	4.89	0.0328	1.65	0.06
SEP 26,83	SEP 25,83	259.0	49.1	*****	4.09	0.1218	4.00	0.72
SEP 28,83	SEP 27,83	7.0	*****	*****	*****	*****	*****	*****
OCT 4,83	OCT 3,83	660.0	19.1	4.24	G 6.50	0.0304	3.80	0.39
OCT 5,83	OCT 4,83	1272.0	44.3	3.80	4.25	0.1148	4.70	0.89
OCT 6,83	OCT 5,83	500.0	15.1	4.15	4.61	0.0556	1.20	0.25
OCT 8,83	OCT 7,83	343.0	28.6	4.12	4.38	0.0800	2.75	0.67
OCT 9,83	OCT 8,83	269.0	28.4	4.14	4.35	0.0782	2.80	0.08
OCT 13,83	OCT 12,83	530.0	6.3	4.80	5.08	0.0262	0.60	0.35
OCT 14,83	OCT 13,83	1611.0	9.3	4.52	4.68	0.0334	0.90	0.11
OCT 15,83	OCT 14,83	247.0	12.2	4.81	5.08	0.0270	1.95	0.33
OCT 23,83	OCT 22,83	381.0	16.5	4.07	4.47	0.0540	1.40	0.51
OCT 24,83	OCT 23,83	35.0	*****	*****	4.29	B 1.4840	2.60	*****
OCT 25,83	OCT 24,83	*****	*****	*****	*****	*****	*****	*****
OCT 26,83	OCT 25,83	51.0	*****	*****	*****	0.0722	3.40	0.74
NOV 2,83	OCT 26,83	275.0	29.4	3.96	4.44	0.1544	3.65	0.71
NOV 3,83	NOV 2,83	468.0	73.7	*****	3.91	0.0134	7.45	1.33
NOV 4,83	NOV 3,83	125.0	7.9	*****	U 7.28	0.0272	0.45	0.12
NOV 5,83	NOV 4,83	527.0	6.7	4.49	5.06	0.1200	4.05	0.07
NOV 11,83	NOV 10,83	527.0	48.6	3.69	4.10	0.0194	0.25	0.88
NOV 12,83	NOV 11,83	561.0	4.4	4.92	G 6.04	0.0464	0.85	0.34
NOV 16,83	NOV 15,83	626.0	14.9	4.11	4.68	0.0372	0.25	0.18
NOV 17,83	NOV 16,83	493.0	10.7	4.36	4.79	0.0618	3.65	0.98
NOV 19,83	NOV 18,83	86.0	*****	*****	4.19	0.1122	2.15	0.54
NOV 21,83	NOV 20,83	604.0	26.0	3.96	4.34	0.0300	4.15	1.17
NOV 24,83	NOV 23,83	261.0	50.0	3.76	4.05	0.0736	2.05	0.39
NOV 26,83	NOV 25,83	76.0	*****	*****	4.30	0.0614	1.60	0.50
NOV 29,83	NOV 28,83	405.0	25.1	3.91	4.30	0.0180	1.05	0.78
NOV 30,83	NOV 29,83	111.0	28.1	*****	4.33	0.0220	0.80	0.22
DEC 1,83	NOV 30,83	151.0	10.2	*****	G 5.89	0.0278	0.45	0.01
DEC 2,83	DEC 1,83	56.0	*****	*****	G 5.93	0.0408	0.90	0.21
DEC 3,83	DEC 2,83	213.0	7.5	4.71	G 5.10	0.0482	0.90	0.32
DEC 5,83	DEC 4,83	232.0	12.0	4.47	4.74	0.0482	0.90	0.42
DEC 6,83	DEC 5,83	272.0	14.7	4.38	4.62	0.0482	0.90	0.42

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM										#06	PAGE : 9	
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L				
BSEP 10,83	SEP 9,83	B 2.93	*****	B 0.415	0.130	G 0.270	*****	*****				
BSEP 17,83	SEP 16,83	0.15	0.07	0.015	0.020	0.015	0.304	0.0631				
BSEP 19,83	SEP 18,83	0.19	0.08	0.030	0.035	0.015	0.286	0.0479				
BSEP 21,83	SEP 20,83	0.17	0.05	0.025	0.020	0.030	0.096	0.0355				
BSEP 22,83	SEP 21,83	0.16	0.02	0.020	0.055	0.040	<T 0.004	G 0.0045				
BSEP 23,83	SEP 22,83	*****	*****	*****	*****	*****	*****	U 0.0001				
BSEP 24,83	SEP 23,83	*****	0.24	*****	*****	*****	0.0129	0.0129				
BSEP 26,83	SEP 25,83	0.65	0.18	0.090	0.010	0.055	0.310	0.0813				
BSEP 28,83	SEP 27,83	*****	*****	*****	*****	*****	*****	*****				
OCT 4,83	OCT 3,83	0.86	0.16	0.180	B 0.140	0.030	0.620	G 0.0003				
OCT 5,83	OCT 4,83	0.04	0.16	0.060	0.075	0.030	0.860	0.0562				
OCT 6,83	OCT 5,83	0.11	0.06	0.010	0.030	<M 0.005	0.098	0.0245				
OCT 8,83	OCT 7,83	0.53	0.16	0.095	0.045	<T 0.010	0.298	0.0417				
OCT 9,83	OCT 8,83	0.58	0.21	0.090	0.045	0.025	0.298	0.0447				
OCT 13,83	OCT 12,83	0.08	0.12	0.010	0.020	<M 0.005	0.076	0.0083				
OCT 14,83	OCT 13,83	0.08	0.04	0.015	0.015	0.005	0.084	0.0209				
OCT 15,83	OCT 14,83	0.51	0.13	0.095	0.075	<M 0.005	0.370	0.0083				
OCT 23,83	OCT 22,83	0.14	0.06	0.030	0.020	0.080	0.074	0.0339				
OCT 24,83	OCT 23,83	*****	0.33	*****	*****	*****	*****	0.0513				
OCT 25,83	OCT 24,83	*****	*****	*****	*****	*****	*****	*****				
OCT 26,83	OCT 25,83	*****	0.29	*****	*****	*****	*****	*****				
NOV 2,83	OCT 26,83	0.55	0.17	0.080	0.075	0.090	0.540	0.0363				
NOV 3,83	NOV 2,83	*****	0.27	*****	*****	*****	0.1230	0.1230				
NOV 4,83	NOV 3,83	*****	0.10	*****	*****	*****	*****	U 0.0001				
NOV 5,83	NOV 4,83	0.07	0.05	0.005	<T 0.010	<T 0.010	0.002	0.0087				
NOV 11,83	NOV 10,83	0.15	0.18	0.020	0.030	0.060	0.570	0.0794				
NOV 12,83	NOV 11,83	0.09	0.06	0.010	<T 0.010	0.015	0.006	G 0.0009				
NOV 16,83	NOV 15,83	0.11	0.11	0.010	<T 0.015	0.050	0.066	0.0209				
NOV 17,83	NOV 16,83	0.08	0.07	0.010	<T 0.010	0.020	0.010	0.0162				
NOV 19,83	NOV 18,83	*****	0.38	*****	*****	*****	*****	0.0646				
NOV 21,83	NOV 20,83	0.20	0.26	0.025	0.035	0.085	0.230	0.0457				
NOV 24,83	NOV 23,83	0.60	0.36	0.045	0.055	0.120	0.540	0.0891				
NOV 26,83	NOV 25,83	*****	0.16	*****	*****	*****	0.0126	0.0126				
NOV 29,83	NOV 28,83	0.12	0.09	0.015	0.020	0.040	0.128	0.0501				
NOV 30,83	NOV 29,83	0.27	0.29	0.040	0.020	0.090	0.206	0.0468				
DEC 1,83	NOV 30,83	0.38	0.20	0.035	0.025	0.100	0.162	G 0.0013				
DEC 2,83	DEC 1,83	*****	0.51	*****	*****	*****	*****	G 0.0012				
DEC 3,83	DEC 2,83	0.25	0.15	0.035	<T 0.010	0.065	0.002	G 0.0079				
DEC 5,83	DEC 4,83	0.12	0.15	0.025	<T 0.010	0.035	0.126	0.0182				
DEC 6,83	DEC 5,83	0.14	0.16	0.025	0.020	0.060	0.154	0.0240				

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE	
DEC 7,83	DEC 6,83	900 1000	800 600	2	30.4	2	29739	2	1	U	FI	N
DEC 9,83	DEC 8,83	800 800	900 1900	2	2.5	2	29740	2	1	28		N
DEC 11,83	DEC 10,83	900 945	900 1600	2	0.4	2	29741	2	1	128		N
DEC 12,83	DEC 11,83	945 750	200 750	2	5.5	2	29742	2	1	80		
DEC 13,83	DEC 12,83	750 750	810 1600	1	4.3	2	29743	2	1	115		
DEC 15,83	DEC 14,83	755 755	830 2330	3	1.4	2	29744	2	1	98		
DEC 17,83	DEC 16,83	915 915	1400 2300	2	1.4	2	29745	2	1	33		N
DEC 19,83	DEC 18,83	830 830	800 1600	2	2.1	2	29746	2	1	52	B	
DEC 22,83	DEC 21,83	750 750	1930 700	2	16.2	2	29747	2	1	58	B	
DEC 23,83	DEC 22,83	750 755	845 300	2	5.2	2	29748	2	1	41		N
DEC 27,83	DEC 26,83	915 915	1400 400	2	1.2	2	29749	2	1	2	E	N
DEC 28,83	DEC 27,83	915 755	2300 755	2	3.2	2	29750	2	1	67		
DEC 29,83	DEC 28,83	755 755	755 2200	2	10.1	2	29751	2	1	88		
DEC 30,83	DEC 29,83	755 755	200 300	2	0.1	2	29752	2	1	31	E	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06				PAGE : 11				
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH6.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 7,83	DEC 6,83	669.0	9.0	4.56	4.82	0.0360	0.65	0.14
DEC 9,83	DEC 8,83	45.0	*****	*****	4.12	0.1020	1.80	*****
DEC 11,83	DEC 10,83	33.0	*****	*****	4.22	0.0828	2.35	1.22
DEC 12,83	DEC 11,83	285.0	17.2	4.18	4.62	D 0.0424	1.35	0.33
DEC 13,83	DEC 12,83	317.0	23.6	4.08	4.36	0.0610	2.20	0.27
DEC 15,83	DEC 14,83	88.0	*****	*****	3.85	0.1624	4.60	1.51
DEC 17,83	DEC 16,83	30.0	*****	*****	5.34	0.0302	2.10	1.02
DEC 19,83	DEC 18,83	71.0	*****	*****	4.74	0.0382	0.45	0.33
DEC 22,83	DEC 21,83	611.0	15.7	4.32	4.51	0.0476	1.00	0.38
DEC 23,83	DEC 22,83	139.0	20.9	*****	4.47	0.0562	2.45	0.41
DEC 27,83	DEC 26,83	2.0	*****	*****	*****	*****	*****	*****
DEC 28,83	DEC 27,83	139.0	28.2	*****	4.19	0.0850	0.40	0.94
DEC 29,83	DEC 28,83	573.0	7.3	4.48	4.89	0.0302	0.20	0.19
DEC 30,83	DEC 29,83	2.0	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
API03 - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 7,83	DEC 6,83	0.11	0.06	U 0.015	0.020	0.035	0.008	0.0151
DEC 9,83	DEC 8,83	*****	*****	*****	*****	*****	*****	0.0759
DEC 11,83	DEC 10,83	*****	G 0.89	*****	*****	*****	*****	0.0603
DEC 12,83	DEC 11,83	0.20	0.22	0.035	0.050	0.150	0.080	0.0240
DEC 13,83	DEC 12,83	0.17	0.10	0.020	0.020	0.050	0.074	0.0437
DEC 15,83	DEC 14,83	0.40	0.47	0.075	0.035	0.230	*****	0.1413
DEC 17,83	DEC 16,83	*****	G 1.17	*****	*****	*****	*****	6 0.0046
DEC 19,83	DEC 18,83	*****	0.30	*****	*****	*****	*****	0.0182
DEC 22,83	DEC 21,83	0.08	0.12	0.020	0.035	0.035	0.070	0.0309
DEC 23,83	DEC 22,83	*****	0.19	*****	*****	*****	0.152	0.0339
DEC 27,83	DEC 26,83	*****	*****	*****	*****	*****	*****	*****
DEC 28,83	DEC 27,83	*****	0.63	*****	*****	*****	<T 0.004	0.0646
DEC 29,83	DEC 28,83	0.03	0.06	0.010	<W 0.005	0.020	<W 0.002	0.0129
DEC 30,83	DEC 29,83	*****	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20										PAGE : 1	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	Gauge DEPTH(MM)	Gauge TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
03-COMP/04-OTHER											
JAN 2,83	JAN 1,83	900	900	2	0.9	2	27713	2	1	###	EK
JAN 4,83	JAN 3,83	800	800	2	0.7	2	27716	2	1	42	N
JAN 5,83	JAN 4,83	800	800	2	0.3	2	27719	2	1	10	N
JAN 6,83	JAN 5,83	800	800	2	0.9	2	27722	2	1	24	N
JAN 7,83	JAN 6,83	800	800	2	8.3	2	27725	2	1	52	
JAN 8,83	JAN 7,83	800	800	2	5.5	2	27728	2	1	85	
JAN 11,83	JAN 10,83	800	800	1	26.9	2	27731	2	1	94	
JAN 12,83	JAN 11,83	800	800	4	5.4	2	27734	2	1	59	
JAN 14,83	JAN 13,83	800	800	2	0.9	2	27738	2	1	###	EK
JAN 15,83	JAN 14,83	800	800	2	3.2	2	27741	2	1	16	N
JAN 16,83	JAN 15,83	900	900	2	0.4	2	27744	2	1	3	N
JAN 17,83	JAN 16,83	900	800	2	0.3	2	27747	2	1	###	EK
JAN 23,83	JAN 22,83	900	900	2	1.1	2	27751	2	1	32	N
JAN 24,83	JAN 23,83	900	800	2	3.1	2	27754	2	1	42	N
JAN 25,83	JAN 24,83	800	800	2	3.0	2	27758	2	1	26	N
JAN 26,83	JAN 25,83	800	800	2	2.8	2	27762	2	1	57	N
JAN 27,83	JAN 26,83	800	800	2	0.2	2	27766	2	1	###	EK
JAN 28,83	JAN 27,83	800	800	2	0.2	2	27769	2	1	###	EK
JAN 31,83	JAN 30,83	800	800	2	7.8	2	27772	2	1	67	
FEB 1,83	JAN 31,83	800	800	2	2.0	2	27776	2	1	29	N
FEB 3,83	FEB 2,83	800	800	1	24.4	2	27780	2	1	98	
FEB 4,83	FEB 3,83	800	800	4	6.4	2	27784	2	1	68	
FEB 5,83	FEB 4,83	800	800	2	0.2	2	27788	2	1	###	EK
FEB 7,83	FEB 6,83	800	800	2	1.3	2	27791	2	1	2	N
FEB 8,83	FEB 7,83	800	800	3	3.0	2	27795	2	1	5	N
FEB 17,83	FEB 16,83	800	800	4	0.2	2	27799	2	1	96	N
FEB 18,83	FEB 17,83	800	800	4	0.2	2	27803	2	1	15	N
FEB 21,83	FEB 18,83	800	900	1	0.6	2	27807	2	1	15	NY3
FEB 23,83	FEB 22,83	800	800	2	11.9	2	27810	2	1	89	
FEB 24,83	FEB 23,83	800	800	2	0.7	2	27814	2	1	37	N
MAR 3,83	MAR 2,83	800	800	4	0.3	2	27820	2	1	119	
MAR 4,83	MAR 3,83	800	800	2	7.9	2	27824	2	1	70	
MAR 5,83	MAR 4,83	800	800	1	1.2	2	27828	2	1	81	
MAR 7,83	MAR 6,83	800	800	1	0.8	2	27831	2	1	97	
MAR 8,83	MAR 7,83	800	900	1	0.2	2	27835	2	1	15	N
MAR 9,83	MAR 8,83	900	800	1	2.4	2	27838	2	1	89	C
MAR 10,83	MAR 9,83	800	800	1	2.4	2	27841	2	1	79	N
MAR 16,83	MAR 14,83	800	800	4	0.5	2	27845	2	1	59	Z
MAR 19,83	MAR 18,83	800	930	1	7.1	2	27848	2	1	29	
MAR 20,83	MAR 19,83	930	930	3	5.6	2	27851	2	1	U 87	G

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCLIM #20										PAGE : 2	
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMH/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L			
JAN 2,83	JAN 1,83	*****	*****	*****	*****	*****	*****	*****			
JAN 4,83	JAN 3,83	19.0	*****	*****	4.34	0.0626	*****	*****			
JAN 5,83	JAN 4,83	2.0	*****	*****	*****	*****	*****	*****			
JAN 6,83	JAN 5,83	14.0	*****	*****	4.22	0.0812	*****	*****			
JAN 7,83	JAN 6,83	279.0	26.0	4.26	4.21	0.0824	1.25	0.66			
JAN 8,83	JAN 7,83	300.0	27.4	4.09	4.30	0.0848	1.80	0.50			
JAN 11,83	JAN 10,83	1626.0	16.3	4.31	4.44	0.0606	1.05	0.23			
JAN 12,83	JAN 11,83	205.0	28.4	4.06	4.19	0.0828	1.55	0.73			
JAN 14,83	JAN 13,83	*****	*****	*****	*****	*****	*****	*****			
JAN 15,83	JAN 14,83	34.0	*****	*****	3.96	0.2460	0.65	1.24			
JAN 16,83	JAN 15,83	1.0	*****	*****	*****	*****	*****	*****			
JAN 17,83	JAN 16,83	*****	*****	*****	*****	*****	*****	*****			
JAN 23,83	JAN 22,83	23.0	*****	*****	4.28	0.0788	*****	*****			
JAN 24,83	JAN 23,83	84.0	*****	*****	3.90	0.1406	2.70	1.05			
JAN 25,83	JAN 24,83	51.0	*****	*****	4.39	0.0660	1.25	0.29			
JAN 26,83	JAN 25,83	104.0	*****	*****	4.66	0.0438	0.85	0.10			
JAN 27,83	JAN 26,83	*****	*****	*****	*****	*****	*****	*****			
JAN 28,83	JAN 27,83	*****	*****	*****	*****	*****	*****	*****			
JAN 31,83	JAN 30,83	337.0	44.0	4.06	3.99	0.1254	2.80	0.80			
FEB 1,83	JAN 31,83	38.0	*****	*****	*****	*****	*****	*****			
FEB 3,83	FEB 2,83	1537.0	26.0	4.29	4.24	0.0828	1.55	0.33			
FEB 4,83	FEB 3,83	283.0	25.2	4.25	4.24	0.0852	1.60	0.35			
FEB 5,83	FEB 4,83	*****	*****	*****	*****	*****	*****	*****			
FEB 7,83	FEB 6,83	2.0	*****	*****	*****	*****	*****	*****			
FEB 8,83	FEB 7,83	4.0	*****	*****	*****	*****	*****	*****			
FEB 17,83	FEB 16,83	186.0	92.0	3.73	3.67	0.2300	5.05	1.69			
FEB 18,83	FEB 17,83	2.0	*****	*****	*****	*****	*****	*****			
FEB 21,83	FEB 18,83	6.0	*****	*****	*****	*****	*****	*****			
FEB 23,83	FEB 22,83	684.0	27.5	4.28	4.26	0.0786	1.55	0.46			
FEB 24,83	FEB 23,83	17.0	*****	*****	4.44	0.0590	*****	*****			
MAR 3,83	MAR 2,83	23.0	*****	*****	4.20	0.0918	*****	*****			
MAR 4,83	MAR 3,83	356.0	30.5	4.24	4.25	0.0746	2.05	0.65			
MAR 5,83	MAR 4,83	63.0	*****	*****	3.90	0.1508	5.95	1.22			
MAR 7,83	MAR 6,83	50.0	*****	*****	4.12	0.0984	3.85	0.56			
MAR 8,83	MAR 7,83	2.0	*****	*****	*****	*****	*****	*****			
MAR 9,83	MAR 8,83	137.0	39.2	*****	4.28	0.0682	1.70	0.49			
MAR 10,83	MAR 9,83	122.0	74.0	*****	3.87	0.1768	6.00	1.30			
MAR 16,83	MAR 14,83	19.0	*****	*****	*****	*****	*****	*****			
MAR 19,83	MAR 18,83	132.0	6.0	*****	5.27	0.0240	0.50	0.09			
MAR 20,83	MAR 19,83	315.0	6.8	4.65	4.97	0.0286	0.35	0.08			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM				#20	PAGE : 3			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE LAB MG/L
JAN 2,83	JAN 1,83							
JAN 4,83	JAN 3,83							0.0457
JAN 5,83	JAN 4,83							0.0603
JAN 6,83	JAN 5,83							0.0617
JAN 7,83	JAN 6,83	0.03	0.12	0.005	<T 0.005	0.015	0.180	0.0501
JAN 8,83	JAN 7,83	<T 0.02	0.07	0.005	<T 0.005	0.025	0.236	0.0363
JAN 11,83	JAN 10,83	<W 0.01	0.07	0.005	<W 0.005	<T	0.060	0.0646
JAN 12,83	JAN 11,83	<T 0.02	0.12	0.005	0.050	0.030	0.288	
JAN 14,83	JAN 13,83							0.1096
JAN 15,83	JAN 14,83							
JAN 16,83	JAN 15,83							
JAN 17,83	JAN 16,83							0.0525
JAN 23,83	JAN 22,83							0.1259
JAN 24,83	JAN 23,83	0.04	0.24		0.070	0.055		0.0407
JAN 25,83	JAN 24,83		0.10					0.0219
JAN 26,83	JAN 25,83	<T 0.01	0.09	0.010	0.040	0.030	0.064	
JAN 27,83	JAN 26,83							
JAN 28,83	JAN 27,83							
JAN 31,83	JAN 30,83	0.06	0.18	<W 0.005	0.030	0.040	0.284	0.1023
FEB 1,83	JAN 31,83							
FEB 3,83	FEB 2,83	0.02	0.13	<W 0.005	0.055	0.050	0.068	0.0575
FEB 4,83	FEB 3,83		0.08				0.066	
FEB 5,83	FEB 4,83							
FEB 7,83	FEB 6,83							
FEB 8,83	FEB 7,83							
FEB 17,83	FEB 16,83		0.40				0.780	0.2138
FEB 18,83	FEB 17,83							
FEB 21,83	FEB 18,83							
FEB 23,83	FEB 22,83	0.03	0.10	0.010	0.010	0.025	0.228	0.0550
FEB 24,83	FEB 23,83							
MAR 3,83	MAR 2,83							
MAR 4,83	MAR 3,83	0.03	0.15	0.010	0.030	0.035	0.490	0.0631
MAR 5,83	MAR 4,83		0.23					0.0562
MAR 7,83	MAR 6,83		0.42					0.1259
MAR 8,83	MAR 7,83							0.0759
MAR 9,83	MAR 8,83	0.11	0.17	0.015	0.120	0.130	0.104	0.0525
MAR 10,83	MAR 9,83	0.16	0.35	0.030	0.440	0.255	0.144	0.1349
MAR 16,83	MAR 14,83		D		G			
MAR 19,83	MAR 18,83	0.11	0.16	0.020	0.050	0.230	<W 0.002	U 0.0054
MAR 20,83	MAR 19,83	0.03	0.06	<T 0.005	0.020	0.035	<W 0.002	0.0107

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM

#20

PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-HOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
MAR 22,83	MAR 21,83	800 800	800 800	2	19.4	2	27854	2	1	33	NC
MAR 23,83	MAR 22,83	800 800	800 1400	2	1.1	2	27857	2	1	1	E
MAR 26,83	MAR 27,83	800 800	800 800	3	1.9	2	27860	2	1	22	N
MAR 29,83	MAR 28,83	800 800	800 1600	4	6.4	2	27863	2	1	119	N
APR 3,83	APR 2,83	800 800	2200 800	3	11.5	2	27866	2	1	79	C
APR 4,83	APR 3,83	800 800	800 1800	1	2.8	2	27869	2	1	67	
APR 5,83	APR 4,83	800 800	800 800	1	0.9	2	27872	2	1	19	N
APR 7,83	APR 6,83	800 800	800 800	1	5.0	2	27875	2	1	99	C
APR 8,83	APR 7,83	800 800	430 800	1	3.8	1	27878	2	1	80	
APR 10,83	APR 9,83	800 800	800 1230	1	17.6	2	27881	2	1	99	
APR 11,83	APR 10,83	1000 800	130 1000	1	0.4	2	27884	2	1	66	
APR 12,83	APR 11,83	800 800	1000 1200	1	6.0	2	27887	2	1	75	
APR 14,83	APR 13,83	800 800	900 1300	1	2.6	1	27891	2	1	78	
APR 15,83	APR 14,83	800 800	800 2300	1	14.0	1	27894	2	1	95	
APR 16,83	APR 15,83	800 800	800 800	1	0.2	1	27897	2	1	****	EK
APR 17,83	APR 16,83	800 800	800 800	2	0.4	3	27900	2	1	****	EK
APR 20,83	APR 19,83	800 800	600 700	2	0.3	2	27903	2	1	36	E
APR 21,83	APR 20,83	800 800	1600 800	2	3.8	2	27906	2	1	46	
APR 22,83	APR 21,83	800 800	800 1100	2	0.4	2	27909	2	1	81	
APR 29,83	APR 28,83	800 800	1830 230	1	8.6	1	27912	2	1	90	
MAY 1,83	APR 30,83	800 800	1400 2000	1	13.8	1	27915	2	1	98	
MAY 2,83	MAY 1,83	800 800	230 800	1	16.0	1	27918	2	1	106	
MAY 3,83	MAY 2,83	800 800	1430 1630	1	23.8	1	27921	2	1	95	
MAY 4,83	MAY 3,83	800 800	1630 2030	1	4.6	1	27924	2	1	76	
MAY 7,83	MAY 6,83	800 800	1800 2300	1	19.8	1	27927	2	1	98	
MAY 8,83	MAY 7,83	800 800	1200 2400	1	38.6	1	27930	2	1	99	
MAY 15,83	MAY 14,83	830 830	2100 200	1	10.0	1	27933	2	1	107	
MAY 20,83	MAY 19,83	800 800	1600 2200	1	11.5	1	27936	2	1	104	
MAY 23,83	MAY 22,83	800 800	1430 600	1	20.0	1	27939	2	1	102	
MAY 24,83	MAY 23,83	800 800	100 200	1	3.0	1	27942	2	1	72	
MAY 26,83	MAY 25,83	800 800	800 2030	1	12.0	1	27945	2	1	91	
MAY 27,83	MAY 26,83	800 800	800 1600	1	2.2	1	27948	2	1	80	
MAY 30,83	MAY 29,83	800 800	1500 300	1	10.0	1	27951	2	1	102	Y3
JUN 1,83	MAY 30,83	800 800	1400 800	1	6.2	1	27954	2	1	92	Z
JUN 7,83	JUN 6,83	830 830	300 830	1	0.9	1	27957	2	1	86	
JUN 10,83	JUN 9,83	830 830	830 930	1	0.8	1	27960	2	1	50	
JUN 27,83	JUN 26,83	800 800	2130 130	1	7.0	1	27963	2	1	94	
JUN 28,83	JUN 27,83	800 800	2200 500	1	3.6	1	27966	2	1	96	
JUL 1,83	JUN 30,83	800 800	800 900	1	0.6	1	27969	2	1	13	E
			2100 2300	1	0.6	1	27972	2	1	96	N

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20				PAGE : 5				
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH6.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAR 22,83	MAR 21,83	412.0	1.2	G 4.90	G 5.15	0.0260	0.35	<T 0.01
MAR 23,83	MAR 22,83	1.0	*****	*****	*****	*****	*****	*****
MAR 28,83	MAR 27,83	28.0	*****	*****	*****	*****	4.25	0.68
MAR 29,83	MAR 28,83	489.0	28.5	4.26	4.31	0.0748	1.50	0.43
APR 3,83	APR 2,83	585.0	8.5	G 4.78	4.94	0.0268	0.50	0.12
APR 4,83	APR 3,83	121.0	17.7	*****	4.51	0.0534	1.00	0.31
APR 5,83	APR 4,83	11.0	*****	*****	*****	*****	*****	*****
APR 7,83	APR 6,83	319.0	59.5	4.20	4.35	0.0732	3.25	0.38
APR 8,83	APR 7,83	196.0	*****	4.07	4.11	0.1068	3.30	0.49
APR 10,83	APR 9,83	1122.0	D 14.6	D 4.50	4.67	0.0368	1.00	0.17
APR 11,83	APR 10,83	17.0	*****	*****	*****	*****	9.40	1.43
APR 12,83	APR 11,83	290.0	*****	4.12	4.20	0.4100	2.30	0.49
APR 14,83	APR 13,83	130.0	*****	*****	3.84	0.1986	8.55	1.11
APR 15,83	APR 14,83	853.0	39.1	4.09	4.19	0.0916	3.65	0.45
APR 16,83	APR 15,83	*****	*****	*****	*****	*****	*****	*****
APR 17,83	APR 16,83	*****	*****	*****	*****	*****	*****	*****
APR 20,83	APR 19,83	7.0	*****	*****	*****	*****	*****	*****
APR 21,83	APR 20,83	113.0	*****	*****	4.83	0.1090	0.85	0.07
APR 22,83	APR 21,83	21.0	*****	*****	*****	*****	0.25	0.04
APR 29,83	APR 28,83	499.0	37.6	4.13	4.27	0.0896	3.70	0.51
MAY 1,83	APR 30,83	867.0	10.9	4.64	4.83	0.0342	0.95	0.08
MAY 2,83	MAY 1,83	1089.0	16.5	4.44	4.67	0.0468	1.65	0.13
MAY 3,83	MAY 2,83	1456.0	13.4	4.62	4.91	0.0350	1.55	0.20
MAY 4,83	MAY 3,83	227.0	16.6	4.45	4.59	0.0474	1.45	0.11
MAY 7,83	MAY 6,83	1254.0	50.8	4.01	4.09	0.1184	3.95	0.88
MAY 8,83	MAY 7,83	2450.0	22.4	4.37	4.55	0.0528	2.60	0.34
MAY 15,83	MAY 14,83	687.0	32.4	4.16	4.29	0.0786	3.20	0.35
MAY 20,83	MAY 19,83	767.0	11.4	4.67	4.84	0.0350	1.10	0.15
MAY 23,83	MAY 22,83	1317.0	21.2	4.33	4.50	0.0556	1.80	0.27
MAY 24,83	MAY 23,83	139.0	*****	*****	4.83	0.0348	1.45	0.07
MAY 26,83	MAY 25,83	704.0	38.3	4.14	4.25	0.0910	3.30	0.65
MAY 27,83	MAY 26,83	113.0	*****	*****	*****	*****	0.75	0.03
MAY 30,83	MAY 29,83	654.0	32.1	4.14	4.25	0.0874	3.25	0.25
JUN 1,83	MAY 30,83	367.0	26.2	4.29	4.47	0.0670	2.80	0.44
JUN 7,83	JUN 6,83	50.0	*****	*****	G 5.43	0.0334	3.45	0.50
JUN 8,83	JUN 7,83	26.0	*****	*****	G 5.62	0.5120	3.70	0.54
JUN 10,83	JUN 9,83	423.0	39.0	4.20	4.41	0.1552	4.90	1.00
JUN 27,83	JUN 26,83	223.0	*****	3.90	4.05	0.1344	7.35	0.81
JUN 28,83	JUN 27,83	5.0	*****	*****	*****	*****	*****	*****
JUL 1,83	JUN 30,83	37.0	*****	*****	3.84	0.1968	7.55	0.98

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM			#20	PAGE : 6				
REMOVAL DATE	EXPOSURE DATE	CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	FREE H+
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	LAB MG/L
MAR 22,83	MAR 21,83	0.03	0.02	<T 0.005	0.010	0.015	<T 0.004	G 0.0071
MAR 23,83	MAR 22,83	*****	*****	*****	*****	*****	*****	*****
MAR 26,83	MAR 27,83	*****	*****	*****	*****	*****	*****	*****
MAR 29,83	MAR 28,83	0.06	0.02	<T 0.005	0.010	0.015	0.064	0.0490
APR 3,83	APR 2,83	D 0.03	<M 0.01	<T 0.005	0.015	0.015	0.060	0.0115
APR 4,83	APR 3,83	0.17	0.05	<T 0.005	0.060	0.050	0.052	0.0309
APR 5,83	APR 4,83	*****	*****	*****	*****	*****	*****	*****
APR 7,83	APR 6,83	0.54	0.16	0.040	0.140	0.105	0.098	0.0447
APR 8,83	APR 7,83	0.14	0.10	0.010	0.060	0.050	0.166	0.0776
APR 10,83	APR 9,83	0.05	0.06	0.010	0.050	0.050	0.064	0.0214
APR 11,83	APR 10,83	*****	*****	*****	*****	*****	*****	*****
APR 12,83	APR 11,83	0.04	0.07	0.010	0.030	0.030	0.114	0.0631
APR 14,83	APR 13,83	0.72	0.31	0.080	0.110	0.160	0.750	0.1445
APR 15,83	APR 14,83	0.27	0.21	0.050	0.050	0.110	0.272	0.0646
APR 16,83	APR 15,83	*****	*****	*****	*****	*****	*****	*****
APR 17,83	APR 16,83	*****	*****	*****	*****	*****	*****	*****
APR 20,83	APR 19,83	*****	*****	*****	*****	*****	*****	*****
APR 21,83	APR 20,83	0.07	0.07	0.010	0.040	0.030	0.024	0.0148
APR 22,83	APR 21,83	*****	0.07	*****	*****	*****	*****	*****
APR 29,83	APR 28,83	0.33	0.11	0.050	0.045	0.030	0.450	0.0537
MAY 1,83	APR 30,83	0.05	0.04	0.020	0.015	0.005	0.040	0.0148
MAY 2,83	MAY 1,83	0.12	0.08	0.030	0.030	0.035	0.152	0.0214
MAY 3,83	MAY 2,83	0.27	0.08	0.045	0.045	0.040	0.282	0.0123
MAY 4,83	MAY 3,83	0.16	0.08	0.025	0.030	0.055	0.020	0.0257
MAY 7,83	MAY 6,83	0.54	0.20	0.065	0.040	0.040	0.430	0.0813
MAY 8,83	MAY 7,83	0.40	0.11	0.065	0.040	0.060	0.352	0.0282
MAY 15,83	MAY 14,83	0.17	0.13	0.025	0.045	0.055	0.420	0.0513
MAY 20,83	MAY 19,83	0.24	0.06	0.035	0.030	0.030	0.074	0.0145
MAY 23,83	MAY 22,83	0.10	0.10	0.020	0.030	0.025	0.198	0.0316
MAY 24,83	MAY 23,83	0.13	0.14	0.025	0.055	0.055	0.106	0.0148
MAY 26,83	MAY 25,83	0.27	0.15	0.045	0.035	0.030	0.518	0.0562
MAY 27,83	MAY 26,83	0.19	0.21	0.065	0.050	0.110	0.164	*****
MAY 30,83	MAY 29,83	0.10	0.08	0.020	0.035	0.035	0.310	0.0562
JUN 1,83	MAY 30,83	0.33	0.12	0.045	0.060	0.045	0.332	0.0339
JUN 7,83	JUN 6,83	*****	0.26	*****	*****	*****	0.720	G 0.0037
JUN 8,83	JUN 7,83	*****	*****	*****	*****	*****	*****	G 0.0024
JUN 10,83	JUN 9,83	1.21	0.22	0.200	0.055	0.040	0.660	0.0389
JUN 27,83	JUN 26,83	0.77	0.25	0.145	0.125	0.085	0.760	0.0891
JUN 28,83	JUN 27,83	*****	*****	*****	*****	*****	*****	*****
JUL 1,83	JUN 30,83	*****	0.34	*****	*****	*****	*****	0.1445

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM										#20	PAGE : 7		
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS		
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		FIELD OFFICE		
JUL 5,83	JUL 1,83	800	1700 2100	1	21.0	1	27975	2	1	107	E	Z	
JUL 9,83	JUL 8,83	800	800 2300 2400	1	1.6	1	27978	2	1	102	E		
JUL 16,83	JUL 15,83	800	800 1230 1300	1	0.1	1	27981	2	1	15	E	N	
JUL 20,83	JUL 19,83	800	800 1400 1430	1	0.1	1	27984	2	1	***	E		
JUL 22,83	JUL 21,83	800	800 1200 1600	1	3.2	1	27987	2	1	27	N		
JUL 29,83	JUL 28,83	800	800 1500 1800	1	1.6	1	27990	2	1	72			
JUL 30,83	JUL 29,83	800	800 1930 2100	1	1.6	1	27993	2	1	84			
AUG 1,83	JUL 31,83	800	800 1900 700	1	7.0	1	27996	2	1	99			
AUG 2,83	AUG 1,83	800	800 1700 1900	1	2.6	1	27999	2	1	U	G		
AUG 4,83	AUG 3,83	800	800 2000 800	1	5.8	1	97701	2	1	78			
AUG 7,83	AUG 6,83	800	800 2000 2100	1	3.2	1	97704	2	1	80	A	JH	
AUG 9,83	AUG 8,83	800	800 1130 1230	1	28.8	1	97707	2	1	100			
AUG 17,83	AUG 16,83	800	800 600 800	1	2.6	1	97710	2	1	97	HM		
AUG 20,83	AUG 19,83	800	800 1400 1630	1	1.8	1	97716	2	1	77	A		
AUG 22,83	AUG 21,83	800	800 2400 800	1	16.4	1	97719	2	1	105			
AUG 23,83	AUG 22,83	800	830 830 1000	1	0.6	1	97722	2	1	5	E	N	
AUG 28,83	AUG 27,83	800	800 1400 1500	1	18.8	1	97725	2	1	108	JC		
AUG 29,83	AUG 28,83	800	800 200 230	1	***	1	97728	2	1	***	E		
AUG 30,83	AUG 29,83	800	830 1600 1630	1	0.1	1	97731	2	1	124	E	N	
AUG 31,83	AUG 30,83	830	1430 1030 1100	1	0.4	1	97734	2	1	66			
SEP 6,83	SEP 5,83	800	830 820 830	1	1.8	1	56001	2	1	75			
SEP 8,83	SEP 6,83	830	830 830 930	1	4.2	1	56004	2	1	88	Z		
SEP 10,83	SEP 9,83	800	800 1700 2430	1	12.8	1	56007	2	1	99	J		
SEP 11,83	SEP 10,83	800	800 130 430	1	4.8	1	56010	2	1	89	J		
SEP 17,83	SEP 16,83	800	800 830 2330	1	21.5	1	56013	2	1	99			
SEP 18,83	SEP 17,83	800	800 1445 1515	1	0.8	1	56016	2	1	58	B		
SEP 19,83	SEP 18,83	800	800 1030 1500	1	9.2	1	56019	2	1	97			
SEP 21,83	SEP 20,83	800	800 2400 800	1	44.2	1	56022	2	1	102			
SEP 22,83	SEP 21,83	800	800 2230 430	1	4.4	1	56025	2	1	81	JHC		
SEP 23,83	SEP 22,83	800	800 2030 100	1	10.0	1	56028	2	1	93	JHCM		
SEP 24,83	SEP 23,83	800	830 1400 1730	1	1.9	1	56031	2	1	55	H		
SEP 26,83	SEP 25,83	800	830 1930 2300	1	5.4	1	56034	2	1	99			
OCT 4,83	OCT 3,83	830	830 1600 1800	1	16.3	1	56037	2	1	100	HM		
OCT 5,83	OCT 4,83	830	800 2000 2230	1	7.9	1	56040	2	1	91			
OCT 6,83	OCT 5,83	800	800 330 730	1	5.4	1	56043	2	1	93			
OCT 7,83	OCT 6,83	800	800 1000 1330	1	3.8	1	56046	2	1	77	JH		
OCT 8,83	OCT 7,83	800	800 1830 600	1	23.0	1	56049	2	1	102			
OCT 11,83	OCT 8,83	800	800 ***	1	1.4	1	56052	2	1	52	Y3		
OCT 13,83	OCT 12,83	800	800 930 1400	1	6.2	1	56055	2	1	94			
OCT 14,83	OCT 13,83	800	830 1700 230	1	29.2	1	56058	2	1	108			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCEM				#20	PAGE : 8			
REMOVAL DATE	EXPOSURE DATE	VOLUME	CONDUCT.	PH FIELD	PH LAB	TOTAL H+ TO PH8.3	SULPHATE	NITRATE
		ML	UMHO/CM			MG/L	MG/L	AS N MG/L
JUL 5,83	JUL 1,83	1450.0	*****	4.35	*****	*****	*****	*****
JUL 9,83	JUL 8,83	105.0	*****	*****	4.43	0.0676	2.50	0.26
JUL 16,83	JUL 15,83	1.0	*****	*****	*****	*****	*****	*****
JUL 20,83	JUL 19,83	*****	*****	*****	*****	*****	*****	*****
JUL 22,83	JUL 21,83	57.0	*****	*****	4.86	0.0386	0.90	0.20
JUL 29,83	JUL 28,83	74.0	*****	*****	3.55	G 0.3880	G 18.00	G 2.18
JUL 30,83	JUL 29,83	87.0	51.0	*****	4.26	0.1000	5.25	0.60
AUG 1,83	JUL 31,83	448.0	35.0	4.10	4.24	0.0864	3.40	0.38
AUG 2,83	AUG 1,83	*****	*****	*****	U 6.98	0.0194	*****	*****
AUG 4,83	AUG 3,83	291.0	53.0	3.97	4.07	0.1162	5.70	0.74
AUG 7,83	AUG 6,83	166.0	*****	4.26	U 5.60	0.0280	1.75	0.16
AUG 9,83	AUG 8,83	1857.0	10.8	4.47	4.92	0.0318	1.35	0.07
AUG 17,83	AUG 16,83	162.0	G 142.0	*****	3.77	G 0.3120	12.80	G 2.20
AUG 20,83	AUG 19,83	89.0	*****	*****	5.12	0.0380	3.20	0.91
AUG 22,83	AUG 21,83	1107.0	22.0	4.18	4.55	0.0582	2.20	0.28
AUG 23,83	AUG 22,83	2.0	*****	*****	*****	*****	*****	*****
AUG 28,83	AUG 27,83	1312.0	8.4	4.55	5.24	0.0266	0.90	0.12
AUG 29,83	AUG 28,83	1.0	*****	*****	*****	*****	*****	*****
AUG 30,83	AUG 29,83	8.0	*****	*****	*****	*****	*****	*****
AUG 31,83	AUG 30,83	17.0	*****	*****	G 5.73	*****	*****	*****
SEP 6,83	SEP 5,83	87.0	*****	*****	3.94	0.2020	10.10	0.66
SEP 8,83	SEP 6,83	239.0	62.0	3.90	4.02	0.1414	7.15	0.50
SEP 10,83	SEP 9,83	820.0	48.3	3.73	4.17	0.0998	5.60	0.79
SEP 11,83	SEP 10,83	276.0	16.0	4.19	4.71	0.0434	1.70	0.24
SEP 17,83	SEP 16,83	1368.0	24.6	4.12	4.38	0.0672	2.00	0.26
SEP 18,83	SEP 17,83	30.0	*****	*****	*****	*****	3.95	0.39
SEP 19,83	SEP 18,83	576.0	34.4	4.01	4.30	0.0816	3.45	0.50
SEP 21,83	SEP 20,83	2910.0	14.5	4.23	4.62	0.0496	1.60	0.13
SEP 22,83	SEP 21,83	230.0	6.7	4.67	G 5.44	0.0228	0.60	0.04
SEP 23,83	SEP 22,83	602.0	4.2	4.75	G 5.38	0.0232	0.20	0.02
SEP 24,83	SEP 23,83	68.0	*****	*****	5.00	0.0296	1.75	0.01
SEP 26,83	SEP 25,83	345.0	31.8	3.88	4.26	0.0832	2.40	0.64
OCT 4,83	OCT 3,83	1053.0	28.6	4.00	4.36	0.0716	3.60	0.36
OCT 5,83	OCT 4,83	461.0	43.4	3.84	4.12	0.1176	4.50	0.61
OCT 6,83	OCT 5,83	324.0	10.0	4.35	4.79	0.0388	1.05	0.11
OCT 7,83	OCT 6,83	190.0	6.0	4.66	G 5.42	0.0258	0.70	0.06
OCT 8,83	OCT 7,83	1514.0	18.2	4.24	4.50	0.0592	1.20	0.37
OCT 11,83	OCT 8,83	47.0	*****	*****	4.17	0.1072	2.90	1.00
OCT 13,83	OCT 12,83	376.0	13.6	4.32	4.66	0.0476	0.95	0.22
OCT 14,83	OCT 13,83	2036.0	9.2	4.48	4.77	0.0326	0.80	0.13

APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM

REMOVAL DATE	EXPOSURE DATE	CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	FREE H LAB
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
JUL 5,83	JUL 1,83	*****	*****	*****	*****	*****	*****	*****
JUL 9,83	JUL 8,83	0.27	0.10	0.040	0.075	0.065	0.410	0.0372
JUL 15,83	JUL 15,83	*****	*****	*****	*****	*****	*****	*****
JUL 20,83	JUL 19,83	*****	*****	*****	*****	*****	*****	*****
JUL 22,83	JUL 21,83	*****	0.32	*****	*****	*****	*****	0.0136
JUL 29,83	JUL 28,83	*****	G 0.76	*****	*****	*****	1.120	0.2818
JUL 30,83	JUL 29,83	*****	0.39	*****	*****	*****	0.780	0.0550
AUG 1,83	JUL 31,83	0.08	0.11	0.025	0.060	0.040	0.350	0.0575
AUG 2,83	AUG 1,83	*****	*****	*****	*****	*****	*****	U 0.0001
AUG 4,83	AUG 3,83	0.36	0.19	0.085	0.075	0.050	0.820	0.0851
AUG 7,83	AUG 6,83	0.13	0.15	0.045	0.180	0.060	0.590	U 0.0025
AUG 9,83	AUG 8,83	0.12	0.03	0.045	0.060	0.040	0.190	0.0120
AUG 17,83	AUG 16,83	G 1.35	0.57	0.285	0.120	0.110	0.930	0.1698
AUG 20,83	AUG 19,83	0.93	0.39	0.125	0.120	0.175	0.910	0.0076
AUG 22,83	AUG 21,83	0.12	0.12	0.025	0.005	0.025	0.228	0.6282
AUG 23,83	AUG 22,83	*****	*****	*****	*****	*****	*****	*****
AUG 26,83	AUG 27,83	0.14	0.09	0.020	0.040	0.030	0.184	0.0058
AUG 29,83	AUG 28,83	*****	*****	*****	*****	*****	*****	*****
AUG 30,83	AUG 29,83	*****	*****	*****	*****	*****	*****	*****
AUG 31,83	AUG 30,83	*****	*****	*****	*****	*****	*****	G 0.0019
SEP 6,83	SEP 5,83	0.63	0.27	0.095	0.120	0.070	0.860	0.1148
SEP 8,83	SEP 6,83	0.48	0.19	0.085	0.055	0.070	0.660	0.0955
SEP 10,83	SEP 9,83	1.03	0.32	0.160	0.075	0.180	0.380	0.0676
SEP 11,83	SEP 10,83	0.25	0.10	0.040	0.035	0.065	0.248	0.0195
SEP 17,83	SEP 16,83	0.11	0.09	0.010	0.075	0.045	0.158	0.0417
SEP 18,83	SEP 17,83	*****	U 0.75	*****	*****	*****	*****	*****
SEP 19,83	SEP 18,83	0.31	0.13	0.035	0.075	0.055	0.440	0.0501
SEP 21,83	SEP 20,83	0.09	0.04	0.010	0.020	0.030	0.152	0.0240
SEP 22,83	SEP 21,83	0.14	0.23	0.025	0.080	0.195	0.068	G 0.0036
SEP 23,83	SEP 22,83	0.07	0.05	0.005	0.030	0.055	0.024	G 0.0042
SEP 24,83	SEP 23,83	0.24	0.34	0.050	0.095	G 0.220	0.010	0.0100
SEP 26,83	SEP 25,83	0.27	0.15	0.030	0.030	0.040	0.230	0.0550
OCT 4,83	OCT 3,83	0.32	0.13	0.600	0.045	0.035	0.550	0.0437
OCT 5,83	OCT 4,83	0.29	0.11	0.025	0.045	0.020	0.510	0.0759
OCT 6,83	OCT 5,83	0.09	0.20	0.010	0.035	0.025	0.152	0.0162
OCT 7,83	OCT 6,83	0.14	0.03	0.065	0.110	0.130	0.132	G 0.0038
OCT 8,83	OCT 7,83	0.14	0.05	0.030	0.020	0.005	0.124	0.0316
OCT 11,83	OCT 8,83	*****	0.23	*****	*****	*****	*****	0.0576
OCT 13,83	OCT 12,83	0.06	0.19	0.025	0.060	0.130	0.092	0.0219
OCT 14,83	OCT 13,83	0.08	0.06	0.010	0.015	<W 0.005	0.070	0.0170

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEN #20										PAGE : 10	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN 02-SHOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		
OCT 15,83	OCT 14,83	830	1330 2330	1	13.4	1	56061	2	1	99	
OCT 17,83	OCT 16,83	800	1530 1600	1	0.1	1	56064	2	1	****	KE
OCT 23,83	OCT 22,83	900	430 900	1	9.8	1	56067	2	1	99	J
OCT 24,83	OCT 23,83	900	900 1800	1	4.6	1	56070	2	1	66	M
OCT 26,83	OCT 25,83	830	2100 100	1	2.0	1	56073	2	1	32	N
OCT 27,83	OCT 26,83	830	1400 2100	1	3.4	1	56076	2	1	84	JC
OCT 29,83	OCT 28,83	830	1930 2030	1	2.8	1	56079	2	1	83	
NOV 2,83	NOV 1,83	830	500 600	1	1.0	1	56082	2	1	65	
NOV 3,83	NOV 2,83	830	900 2000	1	13.3	1	56085	2	1	96	M
NOV 4,83	NOV 3,83	830	830 300	2	9.1	2	56088	2	1	70	JHCH
NOV 12,83	NOV 10,83	800	800 1700	3	16.0	2	56091	2	1	65	Y2
NOV 16,83	NOV 15,83	830	1800 830	2	8.4	2	56094	2	1	54	
NOV 17,83	NOV 16,83	830	830 2400	2	7.4	2	56097	2	1	65	
NOV 20,83	NOV 19,83	800	700 800	1	0.2	2	56100	2	1	124	N
NOV 21,83	NOV 20,83	800	1600 100	1	14.7	2	56103	2	1	100	J
NOV 22,83	NOV 21,83	800	1000 1500	1	2.5	2	56106	2	1	114	
NOV 24,83	NOV 23,83	800	1800 600	1	5.1	2	56109	2	1	97	
NOV 26,83	NOV 25,83	800	800 300	2	0.9	2	56112	2	1	36	C
NOV 29,83	NOV 28,83	800	1200 300	4	9.5	2	56115	2	1	91	
NOV 30,83	NOV 29,83	800	1200 800	2	3.9	2	56118	2	1	35	N
DEC 1,83	NOV 30,83	800	830	2	9.5	2	56121	2	1	74	JHM
DEC 2,83	DEC 1,83	830	830 1900	2	1.8	2	56124	2	1	22	N
DEC 3,83	DEC 2,83	800	800	2	3.5	2	56127	2	1	68	
DEC 5,83	DEC 4,83	900	900	2	0.7	2	56130	2	1	35	N
DEC 6,83	DEC 5,83	900	1500 900	2	4.1	2	56133	2	1	53	M
DEC 7,83	DEC 6,83	900	900 830	2	20.2	2	56136	2	1	62	
DEC 8,83	DEC 7,83	830	830 1200	2	0.1	2	56139	2	1	****	EK
DEC 9,83	DEC 8,83	800	1600 800	2	5.6	2	56142	2	1	75	
DEC 10,83	DEC 9,83	800	800 800	2	2.6	2	56145	2	1	27	N
DEC 11,83	DEC 10,83	800	800 1200	2	0.1	2	56148	2	1	****	EK
DEC 12,83	DEC 11,83	800	830 1800	3	11.9	2	56151	2	1	35	NH
DEC 13,83	DEC 12,83	830	830 1800	3	9.8	2	56154	2	1	81	
DEC 15,83	DEC 14,83	800	1630 2200	3	2.3	2	56157	2	1	87	
DEC 16,83	DEC 15,83	800	600 830	2	1.2	2	56160	2	1	24	N
DEC 18,83	DEC 16,83	800	800	2	3.8	2	56163	2	1	23	NZ
DEC 19,83	DEC 18,83	800	800	2	1.0	2	56166	2	1	40	N
DEC 22,83	DEC 21,83	800	1300 1000	3	27.9	2	56169	2	1	43	IM
DEC 23,83	DEC 22,83	1000	900 1000	2	7.5	2	56172	2	1	56	
DEC 24,83	DEC 23,83	900	1200 300	2	5.2	2	56175	2	1	53	
DEC 26,83	DEC 25,83	900	800	2	0.6	2	56178	2	1	****	EK

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM				#20	PAGE : 11			
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 15,83	OCT 14,83	858.0	10.0	4.58	4.74	0.0324	1.10	0.20
OCT 17,83	OCT 16,83	625.0	13.0	4.07	4.67	0.0420	0.85	0.25
OCT 23,83	OCT 22,83	196.0	13.5	4.25	4.66	0.0442	1.05	0.20
OCT 24,83	OCT 23,83	42.0	3.8	4.78	4.14	0.1134	3.60	0.88
OCT 26,83	OCT 25,83	184.0	15.1	4.78	U 6.13	0.0176	0.30	<M
OCT 27,83	OCT 26,83	149.0	4.20	4.20	4.71	0.0446	2.00	0.16
OCT 29,83	OCT 28,83	42.0	34.5	3.87	4.29	0.1004	4.15	1.02
NOV 2,83	NOV 1,83	822.0	5.6	4.88	4.26	0.0960	3.70	0.59
NOV 3,83	NOV 2,83	412.0	46.7	3.84	G 5.77	0.0174	0.25	0.01
NOV 4,83	NOV 3,83	672.0	17.6	4.23	4.02	0.1248	3.60	0.97
NOV 12,83	NOV 10,83	295.0	6.7	4.56	4.48	0.0506	0.85	0.48
NOV 16,83	NOV 15,83	311.0	25.0	3.75	5.03	0.0242	0.35	0.09
NOV 17,83	NOV 16,83	16.0	58.9	3.62	3.91	0.1490	0.44	0.44
NOV 20,83	NOV 19,83	951.0	20.5	4.25	4.37	0.0624	1.95	0.37
NOV 21,83	NOV 20,83	183.0	26.5	4.09	4.60	0.0438	1.95	0.37
NOV 22,83	NOV 21,83	320.0	23.8	4.57	3.94	0.1422	4.55	1.35
NOV 24,83	NOV 23,83	21.0	26.5	4.57	G 5.77	0.0226	1.60	0.44
NOV 26,83	NOV 25,83	558.0	6.0	4.57	4.36	0.0648	1.65	0.60
NOV 29,83	NOV 28,83	88.0	25.1	4.57	G 5.14	0.0502	0.50	0.10
NOV 30,83	NOV 29,83	451.0	17.1	4.61	G 5.32	0.0254	1.75	0.77
DEC 1,83	NOV 30,83	26.0	6.7	4.61	U 7.46	0.0280	0.50	0.54
DEC 2,83	DEC 1,83	156.0	25.1	4.61	4.55	0.0586	0.30	0.15
DEC 3,83	DEC 2,83	16.0	17.1	4.61	4.99	0.0284	0.80	0.80
DEC 5,83	DEC 4,83	141.0	24.4	4.13	4.35	0.0682	2.00	0.66
DEC 6,83	DEC 5,83	808.0	25.5	4.13	4.45	0.0604	0.95	0.16
DEC 7,83	DEC 6,83	270.0	11.5	4.56	4.73	0.0384	1.45	0.14
DEC 8,83	DEC 7,83	46.0	16.0	4.21	4.53	0.0452	3.15	0.89
DEC 9,83	DEC 8,83	270.0	46.5	4.21	4.05	0.1110	0.80	0.91
DEC 11,83	DEC 10,83	269.0	19.0	4.56	3.83	0.1778	0.80	0.91
DEC 12,83	DEC 11,83	513.0	58.0	4.56	4.28	0.0694	0.75	0.35
DEC 13,83	DEC 12,83	129.0	13.8	4.33	G 6.13	0.0192	1.80	0.47
DEC 15,83	DEC 14,83	19.0	22.6	4.16	4.34	0.0630	0.30	0.21
DEC 16,83	DEC 15,83	58.0	7.5	4.57	4.92	0.0286	0.30	0.21
DEC 18,83	DEC 16,83	26.0	7.5	4.57	4.92	0.0286	0.30	0.21
DEC 19,83	DEC 18,83	782.0	7.5	4.57	4.92	0.0286	0.30	0.21
DEC 22,83	DEC 21,83	177.0	7.5	4.57	4.92	0.0286	0.30	0.21
DEC 23,83	DEC 22,83	177.0	7.5	4.57	4.92	0.0286	0.30	0.21
DEC 24,83	DEC 23,83	177.0	7.5	4.57	4.92	0.0286	0.30	0.21
DEC 26,83	DEC 25,83	177.0	7.5	4.57	4.92	0.0286	0.30	0.21

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM				#20	PAGE : 12			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 15,83	OCT 14,83	0.12	0.06	0.020	0.025	<W 0.005	0.226	0.0182
OCT 17,83	OCT 16,83	0.09	0.11	0.010	0.020	0.055	0.062	0.0214
OCT 23,83	OCT 22,83	0.12	0.15	0.010	<T 0.010	0.065	<W 0.002	0.0219
OCT 24,83	OCT 23,83	0.09	0.54	0.025	0.010	0.130	0.250	0.0724
OCT 26,83	OCT 25,83	0.09	0.12	0.040	<T 0.010	0.095	<W 0.002	U 0.0007
OCT 27,83	OCT 26,83	0.18	0.13	0.010	0.100	0.060	0.490	0.0195
OCT 29,83	OCT 28,83	0.07	0.57	0.010	0.035	0.025	0.002	0.0513
NOV 2,83	NOV 1,83	0.05	0.04	0.010	<T 0.005	0.080	0.036	0.0550
NOV 3,83	NOV 2,83	0.11	0.23	0.015	0.030	0.025	0.002	G 0.0017
NOV 4,83	NOV 3,83	0.08	0.12	0.020	0.040	0.080	0.380	0.0955
NOV 12,83	NOV 10,83	0.06	0.08	0.010	<W 0.005	0.030	<T 0.002	0.0331
NOV 16,83	NOV 15,83	0.11	0.21	0.020	0.030	0.075	0.156	0.0093
NOV 17,83	NOV 16,83	0.36	0.47	0.035	0.040	0.220	0.510	0.1230
NOV 20,83	NOV 19,83	0.08	0.07	0.010	0.015	0.040	0.080	0.0427
NOV 21,83	NOV 20,83	0.16	0.20	0.040	0.075	0.190	0.206	0.0251
NOV 22,83	NOV 21,83	0.06	0.38	0.015	0.055	D 0.040	0.024	0.1148
NOV 24,83	NOV 23,83	0.23	0.08	0.040	<T 0.015	0.080	0.002	G 0.0017
NOV 26,83	NOV 25,83	0.06	0.08	0.015	<T 0.010	0.040	0.080	0.0437
NOV 29,83	NOV 28,83	0.21	0.20	0.035	0.030	0.080	0.234	0.0316
NOV 30,83	NOV 29,83	0.13	0.19	0.030	0.005	0.085	0.008	G 0.0072
DEC 1,83	NOV 30,83	0.05	0.04	0.010	<W 0.005	0.030	0.006	G 0.0048
DEC 2,83	DEC 1,83	0.19	0.21	0.030	0.020	0.070	0.118	U 0.0000
DEC 3,83	DEC 2,83	0.10	0.68	0.030	0.030	0.080	0.0355	0.0447
DEC 5,83	DEC 4,83	0.17	0.34	0.030	0.015	0.140	0.014	0.0355
DEC 6,83	DEC 5,83	0.05	0.04	0.010	<T 0.005	0.040	0.002	0.0186
DEC 7,83	DEC 6,83	0.19	0.30	0.030	<T 0.015	0.040	0.014	0.0282
DEC 8,83	DEC 7,83	0.10	0.30	0.020	<W 0.005	0.140	0.006	0.0102
DEC 9,83	DEC 8,83	0.17	0.42	0.030	0.020	0.070	0.118	0.0447
DEC 10,83	DEC 9,83	0.05	0.08	0.015	0.030	0.080	0.0355	0.0355
DEC 11,83	DEC 10,83	0.10	0.30	0.020	0.015	0.140	0.002	0.0186
DEC 12,83	DEC 11,83	0.10	0.08	0.010	<T 0.015	0.040	0.014	0.0295
DEC 13,83	DEC 12,83	0.17	0.34	0.030	0.070	0.260	0.0891	0.01479
DEC 15,83	DEC 14,83	0.05	0.04	0.010	0.030	0.080	0.006	0.0525
DEC 16,83	DEC 15,83	0.19	0.68	0.030	0.020	0.070	0.118	G 0.0007
DEC 18,83	DEC 16,83	0.10	0.30	0.020	0.015	0.140	0.014	0.0263
DEC 19,83	DEC 18,83	0.17	0.42	0.030	0.070	0.260	0.0891	0.0457
DEC 22,83	DEC 21,83	0.05	0.08	0.015	0.030	0.080	0.0355	0.0120
DEC 23,83	DEC 22,83	0.11	0.16	0.035	<T 0.010	0.065	0.146	0.0120
DEC 24,83	DEC 23,83	0.13	0.17	0.040	0.045	0.150	0.002	0.0120
DEC 26,83	DEC 25,83	0.08	0.08	0.010	<W 0.005	0.080	0.002	0.0120

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

PAGE : 13

#20

STATION NAME : DORSET/DAILY/AEROCHEM

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS
DEC 27,83	DEC 26,83	900	900	2	1.6	2	56181	2	1	1	E
DEC 28,83	DEC 27,83	900	900	2	2.0	2	56184	2	1	24	N
DEC 29,83	DEC 28,83	900	900	2	9.8	2	56187	2	1	83	M
JAN 2,84	DEC 30,83	800	900	2	4.9	2	56190	2	1	60	Z

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #20		PAGE : 14						
REMOVAL DATE	EXPOSURE DATE	VOLUME HL	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 27,83	DEC 26,83	2.0	*****	*****	*****	*****	*****	*****
DEC 28,83	DEC 27,83	31.0	*****	4.21	0.0822	0.60	1.10	1.10
DEC 29,83	DEC 28,83	523.0	6.5	4.65	0.0316	0.35	0.22	0.22
JAN 2,84	DEC 30,83	190.0	33.7	4.11	0.0990	0.55	1.11	1.11

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM				#20	PAGE : 15			
REMOVAL DATE	EXPOSURE DATE	CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	FREE H+ LAB
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
DEC 27,83	DEC 26,83	*****	*****	*****	*****	*****	*****	*****
DEC 28,83	DEC 27,83	*****	0.67	*****	*****	*****	*****	0.0617
DEC 29,83	DEC 28,83	0.04	0.08	0.010	<W 0.005	0.025	0.018	0.0141
JAN 2,84	DEC 30,83	0.19	0.36	0.030	<W 0.005	0.140	0.008	0.0776

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHROVE/DAILY/AEROCHEN 807										PAGE : 1		
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS	
				01-RAIN		01-STD.		02-SPECIAL	01-HOE		FIELD	OFFICE
				02-SHOW		02-NIPHER		03-AES				
				03-COMP/04-OTHER								
JAN 5,83	JAN 4,83	800 800	630 800	2	1.1	2	28215	2	1	19	N	
JAN 7,83	JAN 6,83	745 745	530 745	2	9.9	2	28216	2	1	62	C	
JAN 8,83	JAN 7,83	745 800	745 1000	2	6.1	2	28217	2	1	56	C	
JAN 11,83	JAN 10,83	730 730	1300 1500	1	24.3	2	28218	2	1	96	B	
JAN 12,83	JAN 11,83	730 730	730 930	1	5.6	2	28219	2	1	62	C	
JAN 15,83	JAN 14,83	730 730	200 430	2	5.5	2	28220	2	1	3	CL	N
JAN 22,83	JAN 21,83	730 730	1400 1500	2	1.1	2	28221	2	1	U	U	
JAN 24,83	JAN 23,83	800 800	1700 1800	2	3.3	2	28222	2	1	U	EK	
JAN 25,83	JAN 24,83	800 800	800 1000	2	U	2	28223	2	1	U	U	
JAN 26,83	JAN 25,83	800 800	1600 1700	2	0.3	2	28224	2	1	140	N	
JAN 31,83	JAN 30,83	800 800	1200 1500	2	7.3	2	28225	2	1	48	NJCM	
FEB 3,83	FEB 2,83	730 730	900 1200	1	24.7	2	28226	2	1	82	N	
FEB 8,83	FEB 7,83	730 730	1100 1300	3	5.3	2	28227	2	1	72	N	
FEB 17,83	FEB 16,83	730 730	830 1100	2	1.7	2	28228	2	1	36	N	
FEB 19,83	FEB 18,83	800 800	500 600	2	1.1	2	28229	2	1	U	EK	
FEB 23,83	FEB 22,83	730 730	1600 2000	2	U	2	28230	2	1	U	EK	
MAR 4,83	MAR 3,83	730 730	1300 1500	2	1.1	2	28231	2	1	52	EK	
MAR 5,83	MAR 4,83	730 730	2300 200	2	6.9	2	28232	2	1	U	EK	
MAR 7,83	MAR 6,83	730 730	1130 1300	1	0.9	2	28233	2	1	116	EK	
MAR 9,83	MAR 8,83	730 730	100 200	1	0.7	2	28234	2	1	91	EK	
MAR 10,83	MAR 9,83	730 730	2300 100	1	5.9	2	28235	2	1	85	EK	
MAR 18,83	MAR 17,83	730 730	1630 1800	1	2.5	2	28236	2	1	100	EK	
MAR 20,83	MAR 19,83	730 730	2200 2400	1	7.9	2	28237	2	1	77	G	
MAR 22,83	MAR 21,83	800 800	1200 1600	1	6.1	2	28238	2	1	71	N	
MAR 28,83	MAR 27,83	730 730	830 1400	2	20.1	2	28239	2	1	U	FI	
MAR 29,83	MAR 28,83	830 730	600 730	2	1.7	2	28240	2	1	U	EKF	
APR 3,83	APR 2,83	800 800	2400 400	3	6.1	2	28241	2	1	93	N	
APR 4,83	APR 3,83	800 800	2000 2200	3	12.7	2	28242	2	1	58	N	
APR 5,83	APR 4,83	800 800	1430 1600	1	0.9	2	28243	2	1	63	N	
APR 7,83	APR 6,83	730 730	530 730	1	4.3	2	28244	2	1	34	N	
APR 8,83	APR 7,83	730 730	730 1030	1	4.1	2	28245	2	1	111	N	
APR 10,83	APR 9,83	800 900	600 900	2	17.5	2	28246	2	1	120	N	
APR 11,83	APR 10,83	900 930	900 1000	1	0.5	2	28247	2	1	62	EK	
APR 12,83	APR 11,83	730 730	1430 1630	1	7.5	2	28248	2	1	102	Y2	
APR 15,83	APR 14,83	730 800	1600 1630	1	15.9	2	28249	2	1	114	Y2	
APR 17,83	APR 16,83	700 800	1400 1430	3	0.2	2	28250	2	1	78	EK	
APR 20,83	APR 19,83	730 800	500 600	2	0.4	2	28251	2	1	U	EK	
APR 21,83	APR 20,83	800 730	300 600	2	1.4	2	28252	2	1	U	EK	
							28253	2	1	U	EK	
							28254	2	1	U	EK	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
JAN 5,83	JAN 4,83	14.0	*****	*****	G 5.36	0.0294	*****	*****	
JAN 7,83	JAN 6,83	395.0	24.5	4.21	4.27	0.0734	1.15	0.60	
JAN 8,83	JAN 7,83	221.0	21.6	4.32	4.39	0.0658	1.80	0.52	
JAN 11,83	JAN 10,83	1499.0	14.7	4.36	4.50	0.0558	2.00	0.22	6
JAN 12,83	JAN 11,83	225.0	31.0	*****	4.24	0.0902	*****	0.87	
JAN 15,83	JAN 14,83	13.0	*****	*****	B 6.74	0.0342	*****	*****	
JAN 22,83	JAN 21,83	*****	*****	*****	*****	*****	*****	*****	
JAN 24,83	JAN 23,83	*****	*****	*****	*****	*****	*****	*****	
JAN 25,83	JAN 24,83	85.0	*****	*****	4.36	0.0642	1.60	0.33	
JAN 26,83	JAN 25,83	27.0	*****	*****	6.93	0.0260	1.05	0.11	
JAN 31,83	JAN 30,83	228.0	35.2	4.26	3.92	0.1390	2.80	0.58	
FEB 3,83	FEB 2,83	1304.0	22.5	4.32	4.20	0.0824	1.40	0.33	
FEB 4,83	FEB 3,83	247.0	19.5	4.38	4.30	0.0716	1.30	0.35	
FEB 8,83	FEB 7,83	40.0	*****	*****	4.22	0.0772	0.35	0.80	
FEB 17,83	FEB 16,83	*****	*****	*****	*****	*****	*****	*****	
FEB 19,83	FEB 18,83	*****	*****	*****	*****	*****	*****	*****	
FEB 23,83	FEB 22,83	*****	*****	*****	*****	*****	*****	*****	
FEB 24,83	FEB 23,83	37.0	*****	*****	4.82	0.0336	1.95	0.24	
MAR 4,83	MAR 3,83	*****	*****	*****	*****	*****	*****	*****	
MAR 5,83	MAR 4,83	67.0	*****	*****	3.72	0.2096	9.15	2.00	
MAR 7,83	MAR 6,83	41.0	*****	*****	3.98	0.1296	6.25	0.96	
MAR 9,83	MAR 8,83	325.0	24.6	*****	4.36	0.0628	1.50	0.41	
MAR 10,83	MAR 9,83	161.0	74.5	*****	3.82	0.1808	5.60	0.98	
MAR 18,83	MAR 17,83	391.0	*****	*****	4.96	0.0304	0.45	0.17	
MAR 20,83	MAR 19,83	279.0	*****	*****	G 5.38	0.0242	0.20	0.08	
MAR 22,83	MAR 21,83	79.0	*****	*****	U 6.06	0.0188	0.15	0.05	
MAR 28,83	MAR 27,83	*****	*****	*****	*****	*****	*****	*****	
MAR 29,83	MAR 28,83	365.0	20.6	4.41	4.42	0.0678	1.25	0.31	
APR 3,83	APR 2,83	473.0	6.6	5.05	5.25	0.0226	0.45	0.15	
APR 4,83	APR 3,83	145.0	17.7	*****	U 5.60	0.0262	1.30	0.44	
APR 5,83	APR 4,83	20.0	*****	*****	*****	*****	6.50	0.56	
APR 7,83	APR 6,83	307.0	34.2	4.20	4.35	0.0730	3.65	0.44	
APR 8,83	APR 7,83	316.0	39.2	4.14	4.24	0.0902	3.50	0.50	
APR 10,83	APR 9,83	*****	*****	*****	*****	*****	*****	*****	
APR 11,83	APR 10,83	20.0	*****	*****	*****	*****	4.90	0.84	
APR 12,83	APR 11,83	495.0	34.5	4.13	4.24	0.0858	3.10	0.33	
APR 15,83	APR 13,83	1168.0	41.2	4.07	4.17	0.0980	3.95	0.53	
APR 17,83	APR 16,83	10.0	*****	*****	*****	*****	*****	*****	
APR 20,83	APR 19,83	*****	*****	*****	*****	*****	*****	*****	
APR 21,83	APR 20,83	*****	*****	*****	*****	*****	*****	*****	

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WITNGROVE/DAILY/AEROCHEN 807

PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
APR 22,83	APR 21,83	730 730	900 1100	2	0.2	2	28255	2	1	78	
APR 29,83	APR 28,83	730 730	1730 1930	1	9.6	2	28256	2	1	99	
MAY 2,83	MAY 1,83	730 800	400 600	1	25.8	2	28257	2	1	111	T
MAY 3,83	MAY 2,83	800 800	1530 1630	1	14.8	2	28258	2	1	100	C
MAY 4,83	MAY 3,83	800 800	1100 1230	1	3.2	2	28259	2	1	19	N
MAY 7,83	MAY 6,83	730 730	300 430	1	20.2	1	28260	2	1	92	
MAY 8,83	MAY 7,83	730 800	1630 2030	1	25.8	1	28261	2	1	148	N
MAY 15,83	MAY 14,83	730 800	2000 2330	1	14.0	1	28262	2	1	90	
MAY 20,83	MAY 19,83	730 730	1600 2000	1	14.2	1	28263	2	1	96	
MAY 23,83	MAY 22,83	800 800	1640 1800	1	19.0	1	28264	2	1	124	H
MAY 24,83	MAY 23,83	800 730	1700 1600	1	3.0	1	28265	2	1	33	N
MAY 26,83	MAY 25,83	730 700	1330 1430	1	12.4	1	28266	2	1	74	N
MAY 27,83	MAY 26,83	700 715	1200 1315	1	2.0	1	28267	2	1	39	N
MAY 30,83	MAY 29,83	730 730	1600 1730	1	6.4	1	28268	2	1	83	
JUN 1,83	MAY 30,83	730 700	1400 1500	1	11.4	1	28269	2	1	91	Y2
JUN 8,83	JUN 7,83	700 700	800 830	1	1.0	1	28270	2	1	59	
JUN 10,83	JUN 9,83	700 700	2100 2200	1	8.1	1	28271	2	1	89	
JUN 16,83	JUN 15,83	730 800	1700 1800	1	7.8	1	28272	2	1	91	
JUN 26,83	JUN 25,83	730 800	600 630	1	3.8	1	28273	2	1	61	
JUN 27,83	JUN 26,83	800 730	1720 2000	1	4.8	1	28274	2	1	52	
JUL 5,83	JUL 4,83	800 730	1230 2000	1	16.4	1	28275	2	1	93	HM
JUL 9,83	JUL 8,83	730 730	2330 30	1	8.0	1	28276	2	1	49	NHM
JUL 21,83	JUL 20,83	730 730	1230 1330	1	2.2	1	28277	2	1	70	N
JUL 29,83	JUL 28,83	730 730	740 830	1	3.0	1	28278	2	1	17	
JUL 30,83	JUL 29,83	730 730	1830 2130	1	2.8	1	28279	2	1	65	
AUG 1,83	JUL 31,83	730 730	130 200	1	12.2	1	28280	2	1	95	
AUG 4,83	AUG 3,83	730 730	2330 100	1	4.8	1	28281	2	1	63	
AUG 7,83	AUG 6,83	730 730	2330 100	1	6.6	1	28282	2	1	78	
AUG 9,83	AUG 8,83	730 730	1130 1300	1	17.2	1	28283	2	1	14	F
AUG 17,83	AUG 16,83	730 730	530 730	1	2.4	1	28284	2	1	91	A
AUG 20,83	AUG 19,83	730 800	1530 1600	1	1.4	1	28285	2	1	62	
AUG 22,83	AUG 21,83	730 730	530 630	1	15.0	1	28286	2	1	102	
AUG 31,83	AUG 30,83	730 730	1000 1100	1	2.0	1	28287	2	1	90	
SEP 7,83	SEP 6,83	730 730	900 930	1	3.6	1	28288	2	1	79	C
SEP 8,83	SEP 7,83	730 730	830 930	1	1.8	1	28289	2	1	73	
SEP 10,83	SEP 9,83	730 730	1700 1800	1	4.8	1	28290	2	1	412	AP
SEP 11,83	SEP 10,83	730 730	100 200	1	3.8	1	28291	2	1	93	N
SEP 17,83	SEP 16,83	800 800	930 1730	1	18.6	1	28292	2	1	99	TC
SEP 19,83	SEP 18,83	730 800	1000 1400	1	10.8	1	28293	2	1	115	B
SEP 21,83	SEP 20,83	730 715	2400 715	1	31.0	1	28294	2	1	116	J

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITINGROVE/DAILY/AEROCHEM				#07	PAGE : 5			
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 22,83	APR 21,83	10.0	*****	*****	*****	*****	*****	*****
APR 29,83	APR 28,83	611.0	28.5	4.24	4.38	0.0398	2.95	0.37
MAY 2,83	MAY 1,83	1838.0	13.0	4.55	4.83	0.0738	1.15	0.12
MAY 3,83	MAY 2,83	953.0	16.4	4.56	4.68	0.0462	1.75	0.28
MAY 4,83	MAY 3,83	41.0	*****	*****	*****	*****	1.30	0.12
MAY 7,83	MAY 6,83	1204.0	44.0	4.01	4.09	0.1280	3.90	0.89
MAY 8,83	MAY 7,83	2453.0	21.6	4.41	4.55	0.0552	2.60	0.36
MAY 15,83	MAY 14,83	816.0	30.6	4.19	4.33	0.0740	3.10	0.36
MAY 20,83	MAY 19,83	875.0	13.0	4.62	4.76	0.0386	1.15	0.16
MAY 23,83	MAY 22,83	1520.0	24.8	4.34	4.41	0.0656	2.25	0.28
MAY 24,83	MAY 23,83	65.0	*****	*****	*****	*****	1.05	0.04
MAY 26,83	MAY 25,83	595.0	D 29.0	4.24	4.39	D 0.0716	2.40	0.47
MAY 27,83	MAY 26,83	50.0	*****	*****	5.07	0.0288	0.90	0.03
MAY 30,83	MAY 29,83	341.0	32.1	4.16	4.22	0.0902	3.45	0.31
JUN 1,83	MAY 30,83	665.0	24.1	4.36	4.46	0.0626	2.30	0.42
JUN 8,83	JUN 7,83	38.0	*****	*****	5.81	0.0260	1.85	0.19
JUN 10,83	JUN 9,83	465.0	38.9	4.24	4.41	0.0752	4.80	0.98
JUN 16,83	JUN 15,83	455.0	G 151.0	3.55	3.56	G 0.3560	G 15.80	1.53
JUN 26,83	JUN 25,83	150.0	*****	*****	4.12	0.1112	6.90	0.65
JUN 27,83	JUN 26,83	163.0	*****	3.93	4.06	0.1284	6.40	0.52
JUL 5,83	JUL 4,83	986.0	14.0	4.70	4.75	D 0.0376	0.85	0.16
JUL 9,83	JUL 8,83	252.0	6.7	4.86	5.16	0.0248	0.70	0.03
JUL 21,83	JUL 20,83	100.0	4.3	*****	6.28	0.0180	0.40	0.01
JUL 29,83	JUL 28,83	34.0	*****	*****	*****	*****	*****	*****
JUL 30,83	JUL 29,83	118.0	27.2	*****	4.47	0.0664	3.30	0.36
AUG 1,83	AUG 31,83	746.0	D 15.7	4.48	4.66	0.0452	D 1.70	0.17
AUG 4,83	AUG 3,83	196.0	34.5	4.14	4.26	0.0820	3.90	0.42
AUG 7,83	AUG 6,83	333.0	12.7	4.44	4.73	0.0402	1.30	0.09
AUG 9,83	AUG 8,83	160.0	15.3	*****	4.67	0.0434	2.00	0.07
AUG 17,83	AUG 16,83	141.0	U 144.0	*****	U 3.72	G 0.3480	U 14.90	U 2.20
AUG 20,83	AUG 19,83	56.0	*****	*****	4.67	0.0580	3.75	1.30
AUG 22,83	AUG 21,83	903.0	18.3	4.42	4.59	0.0528	1.95	0.20
AUG 31,83	AUG 30,83	116.0	12.7	*****	5.00	0.0356	1.35	0.26
SEP 7,83	SEP 6,83	184.0	28.0	3.72	3.86	0.1958	10.60	0.74
SEP 8,83	SEP 7,83	85.0	5.9	*****	5.65	0.0228	0.65	0.06
SEP 10,83	SEP 9,83	1268.0	54.0	3.91	4.13	0.1124	5.95	0.85
SEP 11,83	SEP 10,83	228.0	19.0	4.35	4.69	0.0462	2.15	0.30
SEP 17,83	SEP 16,83	1187.0	27.2	3.91	4.11	0.0654	2.70	0.38
SEP 19,83	SEP 18,83	797.0	23.8	4.03	4.49	0.0588	3.30	0.40
SEP 21,83	SEP 20,83	2320.0	15.9	4.11	4.64	U 0.0420	1.70	0.14

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHINGROVE/DAILY/AEROCHEM				#07	PAGE : 6			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 22,83	APR 21,83	*****	*****	*****	*****	*****	*****	*****
APR 29,83	APR 28,83	0.35	0.10	0.050	0.060	0.060	0.410	0.0417
MAY 2,83	MAY 1,83	0.08	0.04	0.015	0.035	0.035	0.126	0.0148
MAY 3,83	MAY 2,83	0.31	0.09	0.045	0.070	0.060	0.294	0.0209
MAY 4,83	MAY 3,83	*****	D	*****	*****	*****	*****	*****
MAY 7,83	MAY 6,83	0.56	0.23	0.075	0.050	0.040	0.440	0.0813
MAY 8,83	MAY 7,83	0.46	0.12	0.075	0.045	0.065	0.450	0.0282
MAY 15,83	MAY 14,83	0.22	0.15	0.030	0.045	0.050	0.420	0.0468
MAY 20,83	MAY 19,83	0.18	0.06	0.025	0.030	0.035	0.100	0.0174
MAY 23,83	MAY 22,83	0.15	0.13	0.025	0.045	0.065	0.280	0.0389
MAY 24,83	MAY 23,83	0.24	0.20	0.060	0.045	0.100	0.104	0.0407
MAY 26,83	MAY 25,83	D	0.10	0.035	0.050	0.020	0.460	D
MAY 27,83	MAY 26,83	0.17	0.19	0.025	0.075	0.050	0.222	0.0085
MAY 30,83	MAY 29,83	0.16	0.10	0.030	0.030	0.015	0.344	0.0603
JUN 1,83	MAY 30,83	0.24	0.09	0.030	0.030	0.030	0.344	0.0347
JUN 8,83	JUN 7,83	*****	0.52	0.245	0.075	0.045	0.680	G
JUN 10,83	JUN 9,83	1.16	0.21	0.085	0.090	0.080	1.030	0.0389
JUN 16,83	JUN 15,83	0.89	0.47	0.135	0.095	0.090	1.000	0.2754
JUN 26,83	JUN 25,83	0.59	0.26	0.060	0.105	0.085	0.630	0.0759
JUN 27,83	JUN 26,83	0.34	0.22	0.035	0.030	0.050	0.350	0.0871
JUL 5,83	JUL 4,83	0.24	0.08	0.020	0.065	0.045	0.210	0.0178
JUL 9,83	JUL 8,83	0.12	0.07	0.030	0.065	0.045	0.210	0.0069
JUL 21,83	JUL 20,83	*****	0.26	0.010	0.055	0.025	0.450	G
JUL 29,83	JUL 28,83	*****	0.42	0.060	0.175	0.120	0.540	0.0005
JUL 30,83	JUL 29,83	*****	0.08	0.025	0.065	0.040	0.160	0.0339
AUG 1,83	JUL 31,83	0.07	0.08	0.025	0.055	0.025	0.200	0.0219
AUG 4,83	AUG 3,83	0.25	0.27	0.060	0.175	0.120	0.540	0.0550
AUG 7,83	AUG 6,83	0.11	0.07	0.025	0.065	0.040	0.160	0.0166
AUG 9,83	AUG 8,83	0.27	0.12	0.060	0.125	0.090	0.148	0.0214
AUG 17,83	AUG 16,83	U	0.52	0.280	U	0.100	1.460	U
AUG 20,83	AUG 19,83	*****	0.52	0.030	0.165	0.100	0.880	0.0214
AUG 22,83	AUG 21,83	0.16	0.08	0.030	0.035	0.025	0.188	0.0257
AUG 31,83	AUG 30,83	0.31	0.26	0.060	0.195	0.105	0.236	D
SEP 7,83	SEP 6,83	0.65	0.26	0.110	0.125	0.060	0.990	0.1380
SEP 8,83	SEP 7,83	*****	0.13	0.165	0.065	0.200	0.088	G
SEP 10,83	SEP 9,83	1.10	0.34	0.070	0.095	0.130	0.390	0.0741
SEP 11,83	SEP 10,83	0.35	0.15	0.020	0.025	0.035	0.508	0.0204
SEP 17,83	SEP 16,83	0.12	0.11	0.020	0.025	0.025	0.192	0.0776
SEP 19,83	SEP 18,83	0.23	0.06	0.020	0.085	0.025	0.610	0.0324
SEP 21,83	SEP 20,83	0.10	0.04	0.010	0.015	0.015	0.162	0.0229

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITINGROVE/DAILY/AEROCHEM										PAGE : 7	
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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS
03-COMP/04-OTHER											
SEP 22.83	SEP 21.83	715 700	715 930	1	7.4	1	28295	2	1	92	C JC
SEP 23.83	SEP 22.83	700 730	700 950	1	17.0	1	28296	2	1	99	BC JM
SEP 24.83	SEP 23.83	730 700	1530 1630	1	3.8	1	28297	2	1	61	
SEP 26.83	SEP 25.83	730 730	1630 1800	1	6.8	1	28298	2	1	84	
OCT 4.83	OCT 3.83	730 730	1900 2300	1	17.6	1	28299	2	1	****	EF
OCT 5.83	OCT 4.83	730 730	830 1030	1	5.0	1	28300	2	1	90	
OCT 6.83	OCT 5.83	730 730	830 930	1	5.8	1	56800	2	1	69	
OCT 7.83	OCT 6.83	730 730	700 900	1	6.8	1	56801	2	1	30	NH
OCT 8.83	OCT 7.83	730 800	2200 100	1	25.8	1	56802	2	1	98	
OCT 9.83	OCT 8.83	800 800	2300 100	1	1.8	1	56803	2	1	69	
OCT 13.83	OCT 12.83	730 730	850 1200	1	5.0	1	56804	2	1	100	
OCT 14.83	OCT 13.83	730 1000	1630 1900	1	20.4	1	56805	2	1	102	J
OCT 15.83	OCT 14.83	1000 800	1400 1630	1	14.4	1	56806	2	1	95	
OCT 23.83	OCT 22.83	730 900	330 900	1	****	1	56807	2	1	****	J
OCT 24.83	OCT 23.83	900 730	900 1230	1	3.8	1	56808	2	1	78	J
OCT 26.83	OCT 25.83	715 715	1400 1600	1	2.0	1	56809	2	1	69	
OCT 27.83	OCT 26.83	715 730	1000 1400	1	2.6	1	56810	2	1	70	C
OCT 29.83	OCT 28.83	730 800	1900 2100	1	2.4	1	56811	2	1	70	
NOV 2.83	NOV 1.83	730 730	530 630	1	1.4	1	56812	2	1	59	
NOV 3.83	NOV 2.83	730 730	930 1430	3	13.2	1	56813	2	1	91	
NOV 4.83	NOV 3.83	730 730	730 1300	2	6.0	2	56814	2	1	14	N
NOV 11.83	NOV 10.83	730 900	700 1400	3	11.7	2	56815	2	1	86	
NOV 12.83	NOV 11.83	900 730	900 1200	2	5.9	2	56816	2	1	7	N
NOV 16.83	NOV 15.83	730 730	1500 2200	2	10.1	2	56817	2	1	57	FI
NOV 17.83	NOV 16.83	730 730	730 1100	2	3.9	2	56818	2	1	63	
NOV 21.83	NOV 20.83	730 800	1300 1800	1	17.3	2	56819	2	1	84	
NOV 22.83	NOV 21.83	800 730	900 1100	1	2.1	2	56820	2	1	140	N
NOV 24.83	NOV 23.83	800 830	1600 1800	1	5.5	2	56821	2	1	98	
NOV 29.83	NOV 28.83	700 600	1500 1630	1	10.5	2	56822	2	1	92	
NOV 30.83	NOV 29.83	600 600	1600 1900	2	4.7	2	56823	2	1	40	N
DEC 1.83	NOV 30.83	600 600	900 1100	2	9.9	2	56824	2	1	43	N NJHCN
DEC 2.83	DEC 1.83	600 600	1400 1600	2	0.5	2	56825	2	1	****	EK
DEC 3.83	DEC 2.83	600 730	2000 2200	2	5.1	2	56826	2	1	51	
DEC 7.83	DEC 6.83	730 830	1600 1900	2	23.1	2	56827	2	1	23	N
DEC 9.83	DEC 8.83	845 730	1300 1500	2	5.9	2	56829	2	1	62	
DEC 11.83	DEC 10.83	630 730	630 930	1	2.3	2	56831	2	1	33	N
DEC 12.83	DEC 11.83	730 630	400 600	3	10.9	2	56832	2	1	47	N
DEC 13.83	DEC 12.83	630 630	630 1100	3	11.7	2	56833	2	1	76	J
DEC 15.83	DEC 14.83	630 630	630 930	1	2.4	2	56834	2	1	89	
DEC 17.83	DEC 16.83	630 800	1500 1630	2	3.3	2	56836	2	1	19	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM				#07	PAGE : 8			
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMH/CM	PH FIELD	PH LAB	TOTAL H+ TO PH6.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 22,83	SEP 21,83	437.0	4.3	4.64	G	0.0154	0.60	<W 0.01
SEP 23,83	SEP 22,83	1062.0	7.4	5.03	U	0.0170	0.55	<W 0.01
SEP 24,83	SEP 23,83	149.0	9.6	*****		0.0340	1.00	0.05
SEP 26,83	SEP 25,83	369.0	25.5	4.22		0.0686	1.90	0.41
OCT 4,83	OCT 3,83	*****	*****	*****	*****	*****	*****	*****
OCT 5,83	OCT 4,83	290.0	60.1	3.74		0.1188	6.05	0.84
OCT 6,83	OCT 5,83	259.0	8.9	4.52		0.0362	1.05	0.08
OCT 7,83	OCT 6,83	133.0	7.5	*****	D	0.0332	0.60	0.16
OCT 8,83	OCT 7,83	1630.0	17.3	4.29		0.0604	1.20	0.40
OCT 9,83	OCT 8,83	80.0	24.2	4.40		0.0684	1.05	0.72
OCT 13,83	OCT 12,83	321.0	15.5	4.26		0.0482	1.30	0.27
OCT 14,83	OCT 13,83	1340.0	9.5	4.19		0.0352	0.75	0.15
OCT 15,83	OCT 14,83	879.0	10.3	4.55		0.0328	1.20	0.21
OCT 23,83	OCT 22,83	529.0	14.5	3.98	D	0.0436	1.05	0.24
OCT 24,83	OCT 23,83	191.0	14.3	4.03		0.0436	1.25	0.18
OCT 26,83	OCT 25,83	89.0	*****	*****		0.0932	2.65	0.76
OCT 27,83	OCT 26,83	118.0	5.0	*****	G	0.0200	0.50	0.04
OCT 29,83	OCT 28,83	109.0	*****	*****		0.0332	*****	*****
NOV 2,83	NOV 1,83	53.0	*****	*****		0.1278	4.55	1.20
NOV 3,83	NOV 2,83	776.0	39.9	3.94		0.1012	4.15	0.72
NOV 4,83	NOV 3,83	54.0	*****	*****	U	0.0158	0.45	0.09
NOV 11,83	NOV 10,83	648.0	42.9	3.74		0.1122	3.55	0.75
NOV 12,83	NOV 11,83	29.0	*****	*****	U	0.0176	2.15	0.16
NOV 16,83	NOV 15,83	373.0	15.1	4.34		0.0880	0.80	0.47
NOV 17,83	NOV 16,83	158.0	8.7	*****	D	0.0270	0.55	0.19
NOV 21,83	NOV 20,83	936.0	27.0	3.97		0.0712	2.15	0.50
NOV 22,83	NOV 21,83	189.0	23.8	4.23		0.0326	3.30	0.40
NOV 24,83	NOV 23,83	348.0	55.0	3.72		0.1732	4.05	1.23
NOV 29,83	NOV 28,83	623.0	22.5	3.98		0.0824	1.60	0.46
NOV 30,83	NOV 29,83	123.0	23.9	*****		0.0634	1.60	0.62
DEC 1,83	NOV 30,83	278.0	4.6	4.80	G	0.0198	0.45	0.08
DEC 2,83	DEC 1,83	*****	*****	*****	*****	*****	*****	*****
DEC 3,83	DEC 2,83	170.0	20.4	4.18		0.0542	1.50	0.73
DEC 7,83	DEC 6,83	352.0	6.5	4.63	G	0.0294	0.35	0.20
DEC 9,83	DEC 8,83	237.0	24.1	4.16		0.0596	0.95	0.82
DEC 11,83	DEC 10,83	50.0	*****	*****	G	0.0240	2.00	0.83
DEC 12,83	DEC 11,83	331.0	14.2	4.30		0.0380	1.15	0.27
DEC 13,83	DEC 12,83	575.0	14.6	4.07		0.0412	1.35	0.16
DEC 15,83	DEC 14,83	138.0	41.0	*****		0.1112	3.30	0.88
DEC 17,83	DEC 16,83	42.0	*****	*****	G	0.0212	0.90	1.13

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MITHSGROVE/DAILY/AEROCHEM 807

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 22,83	SEP 21,83	0.25	0.07	0.020	0.060	0.055	0.046	G 0.0013
SEP 23,83	SEP 22,83	0.11	0.16	0.030	U 0.315	0.110	0.540	U 0.0001
SEP 24,83	SEP 23,83	0.18	0.08	0.030	0.045	0.045	0.006	0.0141
SEP 26,83	SEP 25,83	0.25	0.09	0.035	0.035	0.015	0.136	0.0437
OCT 4,83	OCT 3,83	*****	*****	*****	*****	*****	*****	*****
OCT 5,83	OCT 4,83	0.39	0.18	0.040	0.075	0.055	*****	0.1047
OCT 6,83	OCT 5,83	0.13	0.06	0.015	0.030	0.020	0.172	0.0126
OCT 7,83	OCT 6,83	0.21	0.14	0.045	0.060	0.050	0.098	0.0093
OCT 8,83	OCT 7,83	0.17	0.07	0.030	0.020	0.020	0.124	0.0316
OCT 9,83	OCT 8,83	0.30	0.23	0.060	0.060	0.110	0.310	0.0398
OCT 13,83	OCT 12,83	0.11	0.26	0.030	0.050	0.035	0.098	0.0302
OCT 14,83	OCT 13,83	0.05	0.04	0.010	0.030	0.005	0.058	0.0209
OCT 15,83	OCT 14,83	0.12	0.06	0.020	0.025	0.070	0.260	0.0166
OCT 23,83	OCT 22,83	0.09	0.12	0.025	0.025	0.040	0.022	0.0234
OCT 24,83	OCT 23,83	0.11	0.01	0.065	0.060	0.100	0.032	0.0245
OCT 26,83	OCT 25,83	0.25	0.23	0.025	0.105	0.085	0.194	0.0631
OCT 27,83	OCT 26,83	0.13	0.02	0.025	0.025	0.005	0.054	0.0016
OCT 29,83	OCT 28,83	*****	*****	*****	*****	*****	*****	0.0062
NOV 2,83	NOV 1,83	0.10	0.35	0.015	0.040	0.045	0.660	0.0724
NOV 3,83	NOV 2,83	0.10	0.11	0.015	0.040	0.045	0.320	0.0631
NOV 4,83	NOV 3,83	0.08	0.50	0.010	0.025	0.030	0.328	0.0891
NOV 11,83	NOV 10,83	0.08	0.17	0.010	0.025	0.030	0.170	0.0000
NOV 12,83	NOV 11,83	*****	0.53	0.010	0.020	0.045	0.044	0.0005
NOV 16,83	NOV 15,83	0.08	0.08	0.010	0.020	0.045	0.170	0.0234
NOV 17,83	NOV 16,83	0.14	0.11	0.025	0.025	0.035	0.044	0.0093
NOV 21,83	NOV 20,83	0.15	0.23	0.020	0.030	0.100	0.176	0.0525
NOV 22,83	NOV 21,83	0.20	0.13	0.040	0.035	0.030	0.650	0.0302
NOV 24,83	NOV 23,83	0.35	0.35	0.040	0.050	0.030	0.370	0.1175
NOV 29,83	NOV 28,83	0.09	0.05	0.010	0.030	0.030	0.098	0.0468
NOV 30,83	NOV 29,83	0.20	0.20	0.040	0.050	0.070	0.132	0.0417
DEC 1,83	NOV 30,83	0.08	0.06	0.015	0.020	0.030	0.086	0.0016
DEC 2,83	DEC 1,83	*****	*****	*****	*****	*****	*****	*****
DEC 3,83	DEC 2,83	0.14	0.10	0.030	0.050	0.045	0.510	0.0275
DEC 7,83	DEC 6,83	0.05	0.03	0.010	0.010	0.020	0.136	0.0071
DEC 9,83	DEC 8,83	0.13	0.18	0.020	0.040	0.075	0.380	0.0398
DEC 11,83	DEC 10,83	*****	0.40	0.020	0.055	0.125	0.150	0.0010
DEC 12,83	DEC 11,83	0.12	0.18	0.020	0.040	0.045	0.052	0.0204
DEC 13,83	DEC 12,83	0.10	0.08	0.015	0.040	0.065	0.348	0.0240
DEC 15,83	DEC 14,83	0.17	0.27	0.040	0.080	0.065	0.0851	0.0851
DEC 17,83	DEC 16,83	*****	0.47	*****	*****	*****	*****	0.0007

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(HH)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES	(%)	
				03-COMP/04-OTHER							
DEC 19,83	DEC 18,83	900 1200	900 900	2	5.0	3	56837	2	1	***	EK
DEC 22,83	DEC 21,83	800 800	2300 300	3	19.4	2	56838	2	1	36	B
DEC 23,83	DEC 22,83	800 900	900 1100	2	9.0	2	56839	2	1	48	C
DEC 24,83	DEC 23,83	900 830	1600 1930	2	6.8	2	56840	2	1	37	CD
DEC 26,83	DEC 25,83	900 900	700 900	2	0.6	2	56841	2	1	***	EK
DEC 27,83	DEC 26,83	900 830	***	2	0.5	2	56842	2	1	***	EK
DEC 28,83	DEC 27,83	830 830	930 1230	2	2.4	2	56843	2	1	12	C
DEC 30,83	DEC 29,83	830 830	830 1100	2	9.4	2	56844	2	1	U 39	GC

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITINGROVE/DAILY/AEROCHEM 807

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH6.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 19,83	DEC 18,83	*****	*****	*****	*****	*****	*****	*****
DEC 22,83	DEC 21,83	457.0	6.0	U 4.61	U 5.10	0.0268	0.25	0.23
DEC 23,83	DEC 22,83	277.0	22.5	4.23	4.44	0.0592	2.25	0.53
DEC 24,83	DEC 23,83	164.0	4.7	*****	U 6.69	0.0196	0.25	0.17
DEC 26,83	DEC 25,83	*****	*****	*****	*****	*****	*****	*****
DEC 27,83	DEC 26,83	*****	*****	*****	*****	*****	*****	*****
DEC 28,83	DEC 27,83	19.0	*****	*****	4.27	0.0708	*****	*****
DEC 30,83	DEC 29,83	235.0	*****	*****	U 6.19	0.0190	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM				#07	PAGE : 12			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 19,83	DEC 18,83	*****	*****	*****	*****	*****	*****	*****
DEC 22,83	DEC 21,83	0.06	0.07	0.015	0.025	0.025	0.060	U 0.0079
DEC 23,83	DEC 22,83	0.13	0.19	0.035	0.025	0.130	0.430	0.0363
DEC 24,83	DEC 23,83	0.03	0.07	0.010	0.030	0.025	0.520	U 0.0002
DEC 26,83	DEC 25,83	*****	*****	*****	*****	*****	*****	*****
DEC 27,83	DEC 26,83	*****	*****	*****	*****	*****	*****	*****
DEC 28,83	DEC 27,83	*****	*****	*****	*****	*****	*****	0.0537
DEC 30,83	DEC 29,83	*****	*****	*****	*****	*****	*****	U 0.0006

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05										PAGE : 1	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(HH)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN 02-SHOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-HOE 03-AES		
JAN 4,83	JAN 3,83	830 830	830 1230	2	1.9	2	28638	2	1	50	
JAN 6,83	JAN 5,83	830 830	830 1230	2	1.7	2	28639	2	1	80	
JAN 7,83	JAN 6,83	830 830	400 830	3	9.3	2	28840	2	1	75	
JAN 8,83	JAN 7,83	830 830	1600 1800	2	1.4	2	28841	2	1	65	T
JAN 11,83	JAN 10,83	830 830	1300 1800	1	15.3	2	28842	2	1	97	HH
JAN 12,83	JAN 11,83	830 830	2000 2400	3	2.7	2	28843	2	1	76	
JAN 14,83	JAN 13,83	830 830	2000 2400	2	1.1	2	28844	2	1	****	EK
JAN 15,83	JAN 14,83	830 830	100 830	2	5.5	2	28845	2	1	31	N
JAN 16,83	JAN 15,83	830 830	830 1100	2	1.3	2	28846	2	1	14	N
JAN 23,83	JAN 22,83	830 830	400 600	2	2.7	2	28847	2	1	59	
JAN 24,83	JAN 23,83	830 830	1900 2400	2	6.9	2	28848	2	1	80	
JAN 25,83	JAN 24,83	830 830	2030 2300	2	3.9	2	28849	2	1	46	N
JAN 26,83	JAN 25,83	830 830	900 1115	2	2.5	2	28850	2	1	10	N
JAN 31,83	JAN 30,83	830 830	1230 1830	2	9.9	2	28851	2	1	83	
FEB 1,83	JAN 31,83	830 830	830 1100	4	1.3	2	28852	2	1	57	
FEB 3,83	FEB 2,83	830 830	830 1430	1	19.3	2	28853	2	1	104	
FEB 4,83	FEB 3,83	830 830	830 1330	4	6.7	2	28854	2	1	97	
FEB 7,83	FEB 6,83	830 830	400 830	2	3.5	2	28855	2	1	60	
FEB 8,83	FEB 7,83	830 830	830 1000	2	1.5	2	28856	2	1	50	
FEB 18,83	FEB 17,83	830 830	900 1100	4	1.1	2	28857	2	1	87	
FEB 23,83	FEB 22,83	830 830	2100 200	3	6.7	2	28858	2	1	97	
MAR 4,83	MAR 3,83	830 830	2100 2400	3	3.7	2	28859	2	1	97	
MAR 5,83	MAR 4,83	830 830	1430 1800	1	5.1	2	28860	2	1	114	
MAR 7,83	MAR 6,83	830 830	1900 2000	1	0.9	2	28861	2	1	117	
MAR 9,83	MAR 8,83	830 830	2200 2400	1	1.3	2	28862	2	1	79	
MAR 10,83	MAR 9,83	830 830	1900 2200	1	3.6	2	28863	2	1	97	
MAR 15,83	MAR 14,83	830 830	1900 2000	1	0.2	2	28864	2	1	273	P
MAR 19,83	MAR 18,83	830 830	2100 2400	1	6.7	2	28865	2	1	90	N
MAR 20,83	MAR 19,83	830 830	1400 1800	2	7.1	2	28866	2	1	106	CH
MAR 22,83	MAR 21,83	830 830	900 1400	3	14.1	2	28867	2	1	34	N
MAR 23,83	MAR 22,83	830 830	900 1500	2	7.5	2	28868	2	1	****	N
MAR 28,83	MAR 27,83	830 830	1130 1900	3	10.3	2	28869	2	1	****	E
MAR 29,83	MAR 28,83	830 830	830 1400	4	2.1	2	28870	2	1	130	GE
APR 3,83	APR 2,83	830 830	2100 800	2	14.7	2	28871	2	1	79	N
APR 4,83	APR 3,83	830 830	1730 400	1	6.1	2	28872	2	1	97	HCH
APR 5,83	APR 4,83	830 830	1600 1730	1	0.3	2	28873	2	1	31	N
APR 7,83	APR 6,83	830 830	645 800	1	0.4	2	28874	2	1	210	E
APR 8,83	APR 7,83	830 830	830 1200	1	5.5	2	28875	2	1	108	N
APR 10,83	APR 9,83	830 830	200 830	1	18.7	2	28876	2	1	100	
APR 11,83	APR 10,83	830 830	830 1100	1	1.3	2	28877	2	1	130	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEN #05

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 4,83	JAN 3,83	62.0	*****	*****	4.97	0.0340	0.05	0.08
JAN 6,83	JAN 5,83	88.0	*****	*****	4.09	0.0872	1.55	0.99
JAN 7,83	JAN 6,83	448.0	43.0	3.98	4.14	0.1134	D 2.85	0.97
JAN 8,83	JAN 7,83	59.0	*****	*****	4.09	0.0770	1.25	0.70
JAN 11,83	JAN 10,83	959.0	27.5	4.14	4.44	0.0682	1.90	0.50
JAN 12,83	JAN 11,83	133.0	*****	*****	4.28	0.0924	1.30	0.66
JAN 14,83	JAN 13,83	*****	*****	*****	*****	*****	*****	*****
JAN 15,83	JAN 14,83	111.0	*****	*****	4.06	0.1224	1.15	1.32
JAN 16,83	JAN 15,83	12.0	*****	*****	*****	*****	*****	*****
JAN 23,83	JAN 22,83	103.0	*****	*****	4.43	0.0624	1.30	0.37
JAN 24,83	JAN 23,83	356.0	38.4	4.08	4.06	0.1134	2.10	0.85
JAN 25,83	JAN 24,83	116.0	*****	*****	4.19	0.0916	2.35	0.60
JAN 26,83	JAN 25,83	17.0	*****	*****	*****	*****	*****	*****
JAN 31,83	JAN 30,83	527.0	48.0	3.99	3.99	0.1394	3.20	1.00
FEB 1,83	JAN 31,83	48.0	*****	*****	4.08	0.1062	3.10	0.60
FEB 3,83	FEB 2,83	1290.0	30.6	4.18	4.15	0.0972	1.95	0.51
FEB 4,83	FEB 3,83	418.0	38.0	4.12	4.02	0.1148	2.60	0.64
FEB 7,83	FEB 6,83	135.0	28.0	*****	4.11	0.0918	0.15	0.90
FEB 8,83	FEB 7,83	49.0	*****	*****	4.48	0.0602	0.20	0.32
FEB 18,83	FEB 17,83	62.0	*****	*****	3.31	G 0.5720	G 11.30	G 5.00
FEB 23,83	FEB 22,83	544.0	52.0	4.01	3.97	0.1472	3.95	0.84
MAR 4,83	MAR 3,83	231.0	41.5	4.06	4.24	0.0626	3.40	1.00
MAR 5,83	MAR 4,83	373.0	23.4	4.23	4.38	0.0572	1.80	0.31
MAR 7,83	MAR 6,83	68.0	*****	*****	4.51	0.0572	4.15	0.56
MAR 9,83	MAR 8,83	66.0	*****	*****	3.92	0.1526	4.50	1.28
MAR 10,83	MAR 9,83	226.0	G 92.5	3.66	3.73	G 0.2340	6.75	1.31
MAR 15,83	MAR 14,83	35.0	*****	*****	*****	*****	G 23.50	G 5.90
MAR 19,83	MAR 18,83	390.0	8.9	4.69	4.99	0.0318	0.65	0.18
MAR 20,83	MAR 19,83	485.0	6.6	4.67	5.08	0.0274	0.40	0.10
MAR 22,83	MAR 21,83	315.0	6.1	4.80	5.04	0.0290	0.55	0.05
MAR 23,83	MAR 22,83	*****	*****	*****	*****	*****	*****	*****
MAR 28,83	MAR 27,83	*****	*****	*****	*****	*****	*****	*****
MAR 29,83	MAR 28,83	176.0	44.0	3.99	*****	*****	2.65	0.79
APR 3,83	APR 2,83	748.0	12.8	4.47	4.93	0.0304	0.95	0.27
APR 4,83	APR 3,83	381.0	27.7	4.21	4.33	0.0676	1.85	0.52
APR 5,83	APR 4,83	6.0	*****	*****	*****	*****	*****	*****
APR 7,83	APR 6,83	54.0	*****	*****	*****	*****	5.25	0.68
APR 8,83	APR 7,83	382.0	50.0	3.93	4.01	0.1272	4.45	0.59
APR 10,83	APR 9,83	1208.0	20.4	4.28	4.47	0.0568	1.50	0.30
APR 11,83	APR 10,83	109.0	*****	*****	3.64	0.1876	5.95	1.17

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEN #05

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,83	JAN 3,83	*****	0.15	*****	*****	*****	*****	0.0107
JAN 6,83	JAN 5,83	G 0.86	0.29	0.090	0.025	0.050	0.092	0.0813
JAN 7,83	JAN 6,83	0.09	0.20	0.005	0.025	0.030	D 0.600	0.0724
JAN 8,83	JAN 7,83	*****	0.13	*****	*****	*****	*****	0.0813
JAN 11,83	JAN 10,83	0.10	0.12	0.005	<T 0.005	0.020	0.208	0.0363
JAN 12,83	JAN 11,83	0.06	0.10	0.005	<T 0.005	0.020	0.178	0.0525
JAN 14,83	JAN 13,83	*****	*****	*****	*****	*****	*****	*****
JAN 15,83	JAN 14,83	0.04	0.28	0.040	0.025	0.055	0.074	0.0871
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****
JAN 23,83	JAN 22,83	0.04	0.15	0.045	0.025	0.085	0.032	0.0372
JAN 24,83	JAN 23,83	<T 0.01	0.16	0.010	0.025	0.040	0.162	0.0871
JAN 25,83	JAN 24,83	<T 0.02	0.11	0.010	0.040	*****	0.260	0.0646
JAN 26,83	JAN 25,83	*****	*****	*****	*****	*****	*****	*****
JAN 31,83	JAN 30,83	0.09	0.37	<W 0.005	0.120	D 0.145	0.410	0.1023
FEB 1,83	JAN 31,83	*****	0.14	*****	*****	*****	*****	0.0832
FEB 3,83	FEB 2,83	0.04	0.27	<W 0.005	0.140	0.140	0.148	0.0708
FEB 4,83	FEB 3,83	0.02	0.07	<W 0.005	0.010	0.020	0.324	0.0955
FEB 7,83	FEB 6,83	*****	0.12	*****	*****	*****	<T 0.004	0.0776
FEB 8,83	FEB 7,83	*****	0.07	*****	*****	*****	*****	0.0331
FEB 23,83	FEB 22,83	*****	G 1.00	*****	*****	*****	*****	0.4698
MAR 4,83	MAR 3,83	0.13	0.18	0.015	0.025	0.045	0.590	0.1072
MAR 5,83	MAR 4,83	0.23	0.17	0.035	0.040	0.075	0.780	0.0575
MAR 7,83	MAR 6,83	0.11	0.07	0.015	0.010	0.035	0.052	0.0417
MAR 9,83	MAR 8,83	G 1.15	0.52	G 0.125	G 0.165	G 0.375	*****	0.0309
MAR 10,83	MAR 9,83	D 0.27	0.27	0.025	0.050	0.170	*****	0.1202
MAR 15,83	MAR 14,83	0.07	0.15	0.010	0.025	0.050	0.314	0.1862
MAR 19,83	MAR 18,83	*****	1.51	*****	*****	*****	*****	0.0102
MAR 20,83	MAR 19,83	0.07	0.11	0.010	0.045	0.125	0.106	0.0083
MAR 22,83	MAR 21,83	0.02	0.03	<W 0.005	0.005	0.015	0.044	0.0091
MAR 23,83	MAR 22,83	0.10	0.03	<T 0.005	0.015	0.025	0.002	*****
MAR 26,83	MAR 25,83	*****	*****	*****	*****	*****	*****	*****
MAR 28,83	MAR 27,83	0.15	0.09	0.020	0.020	0.025	0.132	0.0117
APR 3,83	APR 2,83	0.10	0.06	0.010	0.020	0.030	D 0.172	0.0468
APR 4,83	APR 3,83	0.08	0.09	0.010	0.030	0.020	0.240	0.0977
APR 5,83	APR 4,83	*****	*****	*****	*****	*****	*****	0.0339
APR 7,83	APR 6,83	*****	0.25	*****	*****	*****	*****	0.1445
APR 8,83	APR 7,83	0.06	0.08	<W 0.005	0.020	0.020	0.314	0.0977
APR 10,83	APR 9,83	0.06	0.03	<W 0.005	0.030	0.010	0.112	0.0339
APR 11,83	APR 10,83	0.26	0.20	0.020	0.070	0.110	0.600	0.1445

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHIEH #05										PAGE : 4	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(HM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		FIELD OFFICE
APR 14,83	APR 13,83	830 830	530 830	1	3.3	2	28678	2	1	105.	
APR 15,83	APR 14,83	830 830	2000 2200	1	10.7	2	28679	2	1	106	
APR 16,83	APR 15,83	830 830	730 800	3	***	2	28880	2	1	***	E
APR 20,83	APR 19,83	830 830	400 600	2	1.8	2	28881	2	1	11	N
APR 21,83	APR 20,83	830 830	2000 2400	3	4.6	2	28882	2	1	57	NH
APR 23,83	APR 22,83	830 830	1800 1930	1	4.0	2	28883	2	1	120	N
MAY 1,83	APR 30,83	830 830	1245 1900	1	20.4	2	28884	2	1	97	
MAY 2,83	MAY 1,83	830 830	200 600	1	10.0	1	28885	2	1	95	
MAY 3,83	MAY 2,83	830 830	1515 1645	1	27.4	1	28886	2	1	105	
MAY 4,83	MAY 3,83	830 830	1630 2100	1	8.6	1	28887	2	1	96	
MAY 7,83	MAY 6,83	830 830	400 500	1	2.5	1	28888	2	1	93	
MAY 8,83	MAY 7,83	830 830	1830 830	1	29.0	1	28889	2	1	101	
MAY 9,83	MAY 8,83	830 830	830 1000	1	0.4	1	28890	2	1	42	N
MAY 15,83	MAY 14,83	830 830	2015 2400	1	14.4	1	28891	2	1	104	
MAY 20,83	MAY 19,83	830 830	1530 2300	1	20.0	1	28892	2	1	101	
MAY 21,83	MAY 20,83	830 830	1100 1230	1	2.2	1	28893	2	1	87	
MAY 23,83	MAY 22,83	830 830	1500 1930	1	12.5	1	28894	2	1	108	
MAY 24,83	MAY 23,83	830 830	1830 1900	1	0.6	1	28895	2	1	158	N
MAY 26,83	MAY 25,83	830 830	1900 2130	1	8.7	1	28896	2	1	104	
MAY 27,83	MAY 26,83	830 830	1000 1100	1	0.3	1	28897	2	1	52	
MAY 30,83	MAY 29,83	830 830	1900 2000	1	2.8	1	28898	2	1	118	
JUN 1,83	MAY 31,83	830 830	1530 1700	1	10.3	1	28899	2	1	101	
JUN 7,83	JUN 6,83	800 830	800 1300	1	6.4	1	28900	2	1	99	
JUN 10,83	JUN 9,83	830 830	200 400	1	4.0	1	28901	2	1	95	
JUN 26,83	JUN 25,83	830 830	700 730	1	0.4	1	28902	2	1	120	N
JUN 27,83	JUN 26,83	830 830	2145 2400	1	6.6	1	28903	2	1	107	
JUN 28,83	JUN 27,83	830 830	1830 2000	1	4.0	1	28904	2	1	99	
JUL 1,83	JUN 30,83	830 830	2045 2145	1	1.0	1	28905	2	1	54	
JUL 2,83	JUL 1,83	830 830	1400 1430	1	8.2	1	28906	2	1	103	
JUL 3,83	JUL 2,83	830 830	700 730	1	2.2	1	28907	2	1	99	
JUL 5,83	JUL 4,83	830 830	1845 2030	1	8.6	1	28908	2	1	108	
JUL 9,83	JUL 8,83	830 830	2130 2200	1	2.2	1	28909	2	1	92	
JUL 29,83	JUL 28,83	830 830	1630 1730	1	2.3	1	28910	2	1	103	
JUL 30,83	JUL 29,83	830 830	2045 2400	1	18.4	1	28911	2	1	107	
JUL 31,83	JUL 30,83	830 830	600 830	1	6.8	1	28912	2	1	118	
AUG 1,83	JUL 31,83	830 830	1030 1130	1	12.0	1	28913	2	1	107	
AUG 2,83	AUG 1,83	830 830	1545 1615	1	1.0	1	28914	2	1	45	N
AUG 4,83	AUG 3,83	830 830	400 600	1	14.4	1	28915	2	1	107	
AUG 9,83	AUG 8,83	830 830	1500 1515	1	0.7	1	28916	2	1	158	N
AUG 11,83	AUG 10,83	830 830	800 830	1	0.3	1	28593	2	1	93	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMH/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
APR 14,83	APR 13,83	223.0	86.2	3.73	3.84	0.2020	8.50	1.03	
APR 15,83	APR 14,83	745.0	29.7	4.19	4.33	0.0708	2.60	0.38	
APR 16,83	APR 15,83	5.0	*****	*****	*****	*****	*****	*****	
APR 20,83	APR 19,83	13.0	*****	*****	*****	*****	*****	*****	
APR 21,83	APR 20,83	171.0	*****	*****	*****	*****	*****	*****	
APR 29,83	APR 28,83	309.0	28.4	5.06	5.42	0.0208	0.20	0.05	
MAY 1,83	APR 30,83	1277.0	*****	4.44	4.90	0.0386	4.00	0.61	
MAY 2,83	MAY 1,83	615.0	*****	*****	*****	*****	*****	*****	
MAY 3,83	MAY 2,83	25.5	15.6	4.26	4.43	0.0644	2.45	0.30	
MAY 4,83	MAY 3,83	1850.0	15.6	4.52	4.73	0.0404	1.60	0.24	
MAY 7,83	MAY 6,83	534.0	17.5	4.39	4.57	0.0502	1.60	0.14	
MAY 8,83	MAY 7,83	150.0	*****	*****	*****	*****	*****	*****	
MAY 9,83	MAY 8,83	1885.0	15.6	4.52	4.85	0.1740	16.50	3.00	
MAY 10,83	MAY 9,83	11.0	*****	*****	*****	*****	*****	*****	
MAY 15,83	MAY 14,83	960.0	42.9	4.05	4.21	0.0934	4.60	0.49	
MAY 20,83	MAY 19,83	1297.0	13.5	4.57	4.77	0.0386	1.20	0.17	
MAY 21,83	MAY 20,83	124.0	*****	*****	*****	*****	*****	*****	
MAY 23,83	MAY 22,83	873.0	22.2	4.32	4.21	0.1026	4.45	0.97	
MAY 24,83	MAY 23,83	61.0	*****	*****	*****	*****	*****	*****	
MAY 25,83	MAY 24,83	584.0	39.6	4.11	4.23	0.0926	3.55	0.57	
MAY 27,83	MAY 26,83	10.0	*****	*****	*****	*****	*****	*****	
MAY 30,83	MAY 29,83	212.0	49.3	4.00	4.16	0.1148	5.45	0.61	
JUN 1,83	MAY 31,83	667.0	24.2	4.42	4.62	0.0510	2.95	0.51	
JUN 7,83	JUN 6,83	410.0	19.3	4.37	4.54	0.0560	1.95	0.15	
JUN 10,83	JUN 9,83	244.0	*****	3.74	3.82	0.2380	13.30	2.95	
JUN 26,83	JUN 25,83	31.0	*****	*****	*****	*****	*****	*****	
JUN 27,83	JUN 26,83	454.0	49.5	3.97	4.11	0.1122	6.10	0.78	
JUN 28,83	JUN 27,83	255.0	18.5	4.27	4.57	0.0500	2.00	0.29	
JUL 1,83	JUN 30,83	35.0	*****	*****	*****	*****	*****	*****	
JUL 2,83	JUL 1,83	544.0	38.0	4.10	4.32	0.0912	4.95	0.96	
JUL 3,83	JUL 2,83	140.0	*****	*****	*****	*****	*****	*****	
JUL 5,83	JUL 4,83	597.0	17.8	4.39	4.24	0.0878	4.20	0.67	
JUL 9,83	JUL 8,83	131.0	47.3	*****	4.87	0.0364	0.75	0.24	
JUL 29,83	JUL 28,83	152.0	80.0	*****	4.43	0.0426	2.55	0.25	
JUL 30,83	JUL 29,83	1273.0	22.7	*****	3.92	0.0850	7.00	1.03	
JUL 31,83	JUL 30,83	515.0	40.5	4.33	4.56	0.1754	7.70	1.28	
AUG 1,83	JUL 31,83	825.0	34.2	4.05	4.18	0.0534	2.90	0.30	
AUG 2,83	AUG 1,83	29.0	*****	*****	4.26	0.0994	4.15	0.42	
AUG 4,83	AUG 3,83	995.0	41.3	*****	5.84	0.0850	3.60	0.35	
AUG 9,83	AUG 8,83	71.0	*****	4.03	4.18	0.0206	3.90	0.62	
AUG 11,83	AUG 10,83	18.0	*****	*****	7.11	0.0946	2.95	0.49	
					4.39	0.0816	3.50	0.68	

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM				#05	PAGE : 6			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 14,83	APR 13,83	0.35	0.28	0.050	0.100	0.150	0.870	0.1445
APR 15,83	APR 14,83	0.25	0.15	0.040	0.030	0.080	0.186	0.0468
APR 16,83	APR 15,83	*****	*****	*****	*****	*****	*****	*****
APR 20,83	APR 19,83	*****	*****	*****	*****	*****	*****	*****
APR 21,83	APR 20,83	0.05	0.04	0.010	0.020	0.020	0.016	0.0038
APR 29,83	APR 28,83	G 1.18	0.17	0.105	0.060	0.055	0.780	0.0126
MAY 1,83	APR 30,83	*****	*****	*****	*****	*****	*****	*****
MAY 2,83	MAY 1,83	0.20	0.15	0.035	0.040	0.095	0.292	0.0372
MAY 3,83	MAY 2,83	0.29	0.15	0.050	0.030	0.060	0.208	0.0186
MAY 4,83	MAY 3,83	0.14	0.06	0.020	0.015	0.035	0.034	0.0269
MAY 7,83	MAY 6,83	U 6.30	U 0.92	U 0.715	U 0.285	U 0.275	U 1.630	U 0.1000
MAY 8,83	MAY 7,83	0.49	0.12	0.070	0.040	0.065	0.256	0.0141
MAY 9,83	MAY 8,83	*****	*****	*****	*****	*****	*****	*****
MAY 15,83	MAY 14,83	0.36	0.25	0.055	0.050	0.100	0.570	0.0617
MAY 20,83	MAY 19,83	0.15	0.07	0.025	0.025	0.030	0.200	0.0170
MAY 21,83	MAY 20,83	0.26	0.19	0.040	0.050	0.060	1.150	0.0617
MAY 23,83	MAY 22,83	0.14	0.10	0.025	0.030	0.040	0.276	0.0302
MAY 24,83	MAY 23,83	0.25	0.20	0.050	0.025	0.090	0.358	*****
MAY 26,83	MAY 25,83	0.30	0.12	0.045	0.025	0.025	0.540	0.0589
MAY 27,83	MAY 26,83	*****	*****	*****	*****	*****	*****	*****
MAY 30,83	MAY 29,83	0.34	0.19	0.025	0.060	0.060	0.650	0.0692
JUN 1,83	MAY 31,83	0.50	0.15	0.060	0.050	0.045	0.530	0.0240
JUN 7,83	JUN 6,83	0.13	0.07	0.020	0.020	0.020	0.102	0.0288
JUN 10,83	JUN 9,83	G 2.85	G 0.73	G 0.670	0.125	0.105	1.460	0.1514
JUN 26,83	JUN 25,83	*****	*****	*****	*****	*****	*****	0.0501
JUN 27,83	JUN 26,83	0.64	0.20	0.130	0.085	0.040	0.860	0.0776
JUN 28,83	JUN 27,83	*****	0.14	*****	*****	*****	0.350	0.0269
JUL 1,83	JUN 30,83	*****	0.60	*****	*****	*****	*****	0.0479
JUL 2,83	JUL 1,83	0.35	0.16	0.055	0.050	0.040	0.810	0.0575
JUL 3,83	JUL 2,83	*****	0.10	*****	*****	*****	*****	0.0135
JUL 5,83	JUL 4,83	0.43	0.18	0.075	0.060	0.115	0.410	0.0219
JUL 9,83	JUL 8,83	G 2.00	0.39	G 0.280	0.150	0.140	0.790	0.0372
JUL 29,83	JUL 28,83	G 1.54	0.43	0.200	0.060	0.090	0.350	0.1202
JUL 30,83	JUL 29,83	0.32	0.13	0.040	0.030	0.060	0.390	0.0275
JUL 31,83	JUL 30,83	0.09	0.16	0.015	0.030	0.055	0.430	0.0661
AUG 1,83	JUL 31,83	0.07	0.13	0.010	0.025	0.035	0.360	0.0550
AUG 2,83	AUG 1,83	*****	*****	*****	*****	*****	*****	G 0.0014
AUG 4,83	AUG 3,83	0.36	0.13	0.080	0.040	0.025	0.440	0.0661
AUG 9,83	AUG 8,83	*****	0.36	*****	*****	*****	0.800	U 0.0001
AUG 11,83	AUG 10,83	*****	0.55	*****	*****	*****	*****	0.0407

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM

#05

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(HM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
AUG 20,83	AUG 19,83	830 830	1630 1700	1	0.9	1	28918	2	1	142	N
AUG 22,83	AUG 21,83	830 830	300 800	1	22.5	1	28919	2	1	111	
AUG 26,83	AUG 25,83	830 830	600 630	1	0.4	1	28920	2	1	70	
AUG 29,83	AUG 28,83	830 830	1500 1630	1	29.4	1	28921	2	1	97	JH
AUG 30,83	AUG 29,83	830 830	1520 1600	1	14.2	1	28922	2	1	105	
AUG 31,83	AUG 30,83	830 830	1400 1530	1	16.4	1	28923	2	1	106	JH
SEP 7,83	SEP 6,83	830 830	930 940	1	0.3	1	28924	2	1	10	N
SEP 10,83	SEP 9,83	830 830	2115 2130	1	0.4	1	28925	2	1	93	
SEP 11,83	SEP 10,83	830 830	200 230	1	0.9	1	28926	2	1	147	
SEP 17,83	SEP 16,83	830 830	2300 2400	1	16.7	1	28927	2	1	104	N
SEP 18,83	SEP 17,83	830 830	1015 1100	1	2.0	1	28928	2	1	76	
SEP 19,83	SEP 18,83	830 830	1000 1330	1	10.2	1	28929	2	1	98	
SEP 21,83	SEP 20,83	830 830	400 800	1	14.4	1	28930	2	1	99	
SEP 22,83	SEP 21,83	830 830	830 1030	1	2.0	1	28931	2	1	75	
SEP 23,83	SEP 22,83	830 830	1300 1330	1	1.0	1	28932	2	1	53	
SEP 24,83	SEP 23,83	830 830	1300 1330	1	1.3	1	28933	2	1	98	
SEP 26,83	SEP 25,83	830 830	1915 2300	1	4.4	1	28934	2	1	99	
SEP 28,83	SEP 27,83	830 830	830 840	1	0.3	1	28935	2	1	15	N
OCT 4,83	OCT 3,83	830 830	2000 2400	1	10.2	1	28936	2	1	99	J
OCT 5,83	OCT 4,83	830 830	2300 2400	1	18.2	1	28937	2	1	102	
OCT 6,83	OCT 5,83	830 830	1300 1615	1	8.2	1	28938	2	1	96	
OCT 7,83	OCT 6,83	830 830	1200 1215	1	4.8	1	28939	2	1	98	J
OCT 8,83	OCT 7,83	830 830	600 830	1	8.4	1	28940	2	1	101	JHM
OCT 9,83	OCT 8,83	830 830	830 1200	1	2.6	1	28941	2	1	156	
OCT 12,83	OCT 11,83	830 830	745 830	1	0.7	1	28942	2	1	120	N
OCT 13,83	OCT 12,83	830 830	830 1130	1	8.0	1	28943	2	1	103	N
OCT 14,83	OCT 13,83	830 830	1700 2200	1	22.4	1	28944	2	1	103	J
OCT 15,83	OCT 14,83	830 830	1515 1700	1	4.6	1	28945	2	1	92	JH
OCT 23,83	OCT 22,83	830 830	500 830	1	4.5	1	28946	2	1	97	
OCT 24,83	OCT 23,83	830 830	830 1230	1	2.7	1	28947	2	1	76	
OCT 26,83	OCT 25,83	830 830	2245 2330	1	2.0	1	28948	2	1	58	
OCT 27,83	OCT 26,83	830 830	1630 2000	1	2.3	1	28949	2	1	79	HCH
OCT 29,83	OCT 28,83	830 830	1730 1800	1	2.3	1	28950	2	1	72	HH
NOV 2,83	NOV 1,83	830 830	530 830	1	2.3	1	28951	2	1	75	HH
NOV 3,83	NOV 2,83	830 830	1745 2000	1	10.5	1	28952	2	1	101	
NOV 4,83	NOV 3,83	830 830	2200 2400	2	2.0	2	28953	2	1	10	N
NOV 5,83	NOV 4,83	830 830	1030 1800	2	7.4	2	28954	2	1	83	JC
NOV 11,83	NOV 10,83	830 830	1930 830	1	7.7	2	28955	2	1	98	
NOV 12,83	NOV 11,83	830 830	830 1200	3	9.7	2	28956	2	1	35	NJHCH
NOV 16,83	NOV 15,83	830 830	1400 1700	3	10.6	2	28957	2	1	95	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM				805	PAGE : 8			
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 20,83	AUG 19,83	82.0	*****	*****	U 6.21	0.0254	2.95	0.79
AUG 22,83	AUG 21,83	1603.0	16.4	*****	4.68	0.0478	1.55	0.16
AUG 26,83	AUG 25,83	18.0	*****	*****	4.27	0.1120	*****	*****
AUG 29,83	AUG 28,83	1836.0	8.9	4.42	G 5.28	0.0280	1.40	0.06
AUG 30,83	AUG 29,83	956.0	30.2	4.04	4.38	0.0732	4.35	0.17
AUG 31,83	AUG 30,83	1115.0	6.1	4.62	G 5.87	0.0190	0.75	0.17
SEP 7,83	SEP 6,83	2.0	*****	*****	*****	*****	*****	*****
SEP 10,83	SEP 9,83	24.0	*****	*****	U 7.23	0.0190	5.20	1.23
SEP 11,83	SEP 10,83	85.0	20.5	*****	G 5.64	0.0290	3.65	0.54
SEP 17,83	SEP 16,83	1118.0	39.7	4.03	4.16	0.1006	3.60	0.55
SEP 18,83	SEP 17,83	98.0	37.8	*****	4.18	0.0946	3.70	0.50
SEP 19,83	SEP 18,83	646.0	23.5	4.31	4.42	0.0636	2.30	0.36
SEP 21,83	SEP 20,83	922.0	19.1	4.35	4.49	0.0544	1.85	0.21
SEP 22,83	SEP 21,83	97.0	5.1	*****	5.18	0.0262	0.50	0.07
SEP 23,83	SEP 22,83	34.0	*****	*****	G 6.26	0.0178	0.70	0.06
SEP 24,83	SEP 23,83	82.0	13.6	*****	4.64	0.0456	1.45	0.05
SEP 26,83	SEP 25,83	281.0	49.1	3.97	4.10	0.1268	4.30	0.76
SEP 28,83	SEP 27,83	3.0	*****	*****	*****	*****	*****	*****
OCT 4,83	OCT 3,83	652.0	20.2	4.02	4.79	0.0460	4.10	0.43
OCT 5,83	OCT 4,83	1190.0	49.3	3.80	4.13	0.1182	5.05	1.07
OCT 6,83	OCT 5,83	507.0	15.9	3.95	4.53	0.0548	1.20	0.25
OCT 7,83	OCT 6,83	303.0	4.3	4.68	G 5.44	0.0222	0.40	0.02
OCT 8,83	OCT 7,83	547.0	28.6	4.15	4.36	0.0756	2.90	0.68
OCT 9,83	OCT 8,83	260.0	24.2	4.17	4.38	0.0694	2.10	0.48
OCT 12,83	OCT 11,83	54.0	*****	*****	4.71	0.0410	1.70	0.36
OCT 13,83	OCT 12,83	531.0	6.0	4.63	5.12	0.0250	0.70	0.04
OCT 14,83	OCT 13,83	1489.0	9.5	4.20	4.78	0.0356	1.10	0.11
OCT 15,83	OCT 14,83	274.0	8.5	4.38	U 5.30	0.0256	1.40	0.23
OCT 23,83	OCT 22,83	280.0	19.2	4.07	4.44	0.0574	1.35	0.41
OCT 24,83	OCT 23,83	133.0	24.8	*****	4.38	0.0696	2.05	0.35
OCT 26,83	OCT 25,83	75.0	*****	*****	4.19	0.0940	3.25	0.79
OCT 27,83	OCT 26,83	117.0	7.4	*****	G 5.32	0.0244	0.85	0.04
OCT 29,83	OCT 28,83	93.0	20.5	*****	U 7.36	0.0186	3.60	0.95
NOV 2,83	NOV 1,83	112.0	67.0	*****	3.97	0.1826	6.60	1.54
NOV 3,83	NOV 2,83	680.0	72.5	3.63	3.96	0.1834	6.90	1.41
NOV 4,83	NOV 3,83	14.0	*****	*****	*****	*****	*****	*****
NOV 5,83	NOV 4,83	395.0	6.2	4.59	G 5.52	0.0222	0.30	0.05
NOV 11,83	NOV 10,83	487.0	47.0	3.77	4.14	0.1186	4.05	0.87
NOV 12,83	NOV 11,83	220.0	5.2	G 4.93	G 5.73	0.0194	0.45	0.01
NOV 16,83	NOV 15,83	649.0	16.9	4.16	4.57	0.0506	1.05	0.36
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							D 1.05	0.56

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05		PAGE : 9									
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L			
AUG 20,83	AUG 19,83	1.28	0.36	0.155	0.125	G 0.210	0.750	U 0.0006			
AUG 22,83	AUG 21,83	0.13	0.06	0.015	0.015	0.025	0.142	0.0209			
AUG 26,83	AUG 25,83	*****	*****	*****	*****	*****	*****	0.0537			
AUG 29,83	AUG 28,83	0.29	0.04	0.020	0.090	0.100	0.234	G 0.0052			
AUG 30,83	AUG 29,83	0.71	0.08	0.040	0.030	<T	0.270	0.0417			
AUG 31,83	AUG 30,83	0.34	0.05	0.015	0.070	0.065	0.216	G 0.0013			
SEP 7,83	SEP 6,83	*****	*****	*****	*****	*****	*****	*****			
SEP 10,83	SEP 9,83	*****	U 0.89	*****	*****	*****	*****	*****			
SEP 11,83	SEP 10,83	*****	0.24	*****	*****	*****	*****	U 0.0001			
SEP 17,83	SEP 16,83	0.17	0.25	0.020	0.015	0.020	0.860	G 0.0023			
SEP 18,83	SEP 17,83	0.26	0.16	0.050	0.045	0.055	0.312	0.0692			
SEP 19,83	SEP 18,83	0.29	0.11	0.035	0.035	0.020	0.338	0.0661			
SEP 21,83	SEP 20,83	0.21	0.11	0.030	0.025	0.035	0.236	0.0380			
SEP 22,83	SEP 21,83	0.18	0.05	0.030	0.015	0.040	0.114	0.0324			
SEP 23,83	SEP 22,83	*****	0.44	*****	*****	*****	<M 0.002	G 0.0066			
SEP 24,83	SEP 23,83	0.19	0.07	0.030	<T 0.010	0.045	<M 0.002	G 0.0005			
SEP 26,83	SEP 25,83	0.60	0.19	0.095	0.050	0.035	0.276	0.0229			
SEP 28,83	SEP 27,83	*****	*****	*****	*****	*****	*****	0.0794			
OCT 4,83	OCT 3,83	0.96	0.14	0.195	0.050	0.030	0.560	*****			
OCT 5,83	OCT 4,83	0.45	0.20	0.055	0.060	0.030	0.960	0.0162			
OCT 6,83	OCT 5,83	0.11	0.07	0.010	0.015	0.020	0.088	0.0741			
OCT 7,83	OCT 6,83	0.19	0.02	0.025	0.055	0.065	0.094	0.0295			
OCT 8,83	OCT 7,83	0.61	0.16	0.100	0.055	<T 0.010	0.304	G 0.0036			
OCT 9,83	OCT 8,83	0.26	0.26	0.035	0.050	0.070	0.176	0.0437			
OCT 12,83	OCT 11,83	*****	0.59	*****	*****	*****	0.142	0.0417			
OCT 13,83	OCT 12,83	0.07	0.01	0.020	<T 0.010	0.065	0.080	0.0195			
OCT 14,83	OCT 13,83	0.11	<M	0.020	0.020	D 0.025	0.100	0.0076			
OCT 15,83	OCT 14,83	0.34	0.01	0.065	0.060	U 0.025	0.302	0.0166			
OCT 23,83	OCT 22,83	0.17	0.03	0.030	0.020	0.125	0.102	U 0.0050			
OCT 24,83	OCT 23,83	0.11	0.03	0.020	<T 0.015	0.045	0.128	0.0363			
OCT 26,83	OCT 25,83	*****	0.29	*****	*****	*****	0.342	0.0417			
OCT 27,83	OCT 26,83	0.14	0.15	0.025	<T 0.010	0.040	0.002	0.0646			
OCT 29,83	OCT 28,83	1.26	0.24	0.200	0.120	0.145	<M	G 0.0048			
NOV 2,83	NOV 1,83	0.29	0.28	0.035	0.085	0.120	0.840	U 0.0000			
NOV 3,83	NOV 2,83	0.27	0.27	0.035	0.065	0.130	1.140	0.1072			
NOV 4,83	NOV 3,83	*****	*****	*****	*****	*****	*****	0.1096			
NOV 5,83	NOV 4,83	0.08	0.06	0.010	0.130	0.090	<T 0.002	G 0.0030			
NOV 11,83	NOV 10,83	0.15	0.20	0.020	0.040	0.060	0.510	0.0724			
NOV 12,83	NOV 11,83	0.11	0.07	0.010	<T 0.010	0.035	<M 0.002	G 0.0019			
NOV 16,83	NOV 15,83	0.11	0.11	0.015	0.025	0.065	0.092	0.0269			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05													PAGE : 10
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT		SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS	
								02-APIOS 03-SPECIAL	01-MOE 03-AES				
03-COMP/04-OTHER													
NOV 17,83	NOV 16,83	830 830	1300 1800	2	5.9	2	28958	2		1	66	M	
NOV 19,83	NOV 18,83	830 830	2000 2400	2	2.1	2	28959	2		1	80		
NOV 21,83	NOV 20,83	830 830	1615 2200	1	8.5	2	28960	2		1	103	J	
NOV 22,83	NOV 21,83	830 830	930 1015	1	0.5	2	28961	2		1	156	M	
NOV 24,83	NOV 23,83	830 830	1700 1900	1	3.3	2	28962	2		1	108		
NOV 29,83	NOV 28,83	830 830	2000 2100	1	7.3	2	28963	2		1	104		
NOV 30,83	NOV 29,83	830 830	1545 1900	2	3.3	2	28964	2		1	60		
DEC 1,83	NOV 30,83	830 830	830 1000	2	2.3	2	28965	2		1	23	M	
DEC 2,83	DEC 1,83	830 830	2000 2200	2	0.9	2	28966	2		1	50	A	
DEC 3,83	DEC 2,83	830 830	1200 1600	2	1.5	2	28967	2		1	31	M	
DEC 5,83	DEC 4,83	830 830	830 1115	3	3.9	2	28968	2		1	65		
DEC 6,83	DEC 5,83	830 830	200 830	3	9.1	2	28969	2		1	92	J	
DEC 7,83	DEC 6,83	830 830	830 1900	2	24.5	2	28970	2		1	52	M	
DEC 9,83	DEC 8,83	830 830	1730 1830	2	0.7	2	28971	2		1	78		
DEC 10,83	DEC 9,83	830 830	1430 1600	2	0.9	2	28972	2		1	19	M	
DEC 12,83	DEC 11,83	830 830	400 600	1	6.1	2	28973	2		1	37	M	
DEC 13,83	DEC 12,83	830 830	900 1400	1	5.3	2	28974	2		1	90		
DEC 15,83	DEC 14,83	830 830	2000 2200	1	1.7	2	28975	2		1	83	M	
DEC 16,83	DEC 15,83	830 830	730 830	2	0.8	2	28976	2		1	25		
DEC 18,83	DEC 17,83	830 830	1300 1500	2	1.2	2	28977	2		1	54		
DEC 22,83	DEC 21,83	900 900	****	1	19.8	2	28978	2		1	51		
DEC 23,83	DEC 22,83	900 900	****	2	3.8	2	28979	2		1	81	J	
DEC 28,83	DEC 27,83	900 900	****	1	5.0	2	28980	2		1	55	C	
DEC 29,83	DEC 28,83	900 900	****	2	13.0	2	28981	2		1	65	HM	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
NOV 17,83	NOV 16,83	253.0	16.0	4.16	4.58	0.0482	1.10	0.28
NOV 19,83	NOV 18,83	108.0	36.0	*****	4.27	0.0744	2.80	0.95
NOV 21,83	NOV 20,83	563.0	26.3	3.86	4.32	0.0658	2.05	0.53
NOV 22,83	NOV 21,83	50.0	41.8	*****	4.61	0.0500	5.25	1.59
NOV 24,83	NOV 23,83	230.0	66.0	3.49	3.89	0.1506	4.80	1.56
NOV 29,83	NOV 28,83	487.0	25.7	3.89	4.28	0.0790	2.05	0.55
NOV 30,83	NOV 29,83	129.0	29.6	*****	4.28	0.0654	1.80	0.80
DEC 1,83	NOV 30,83	34.0	*****	*****	U 7.38	0.0122	1.80	0.20
DEC 2,83	DEC 1,83	29.0	*****	*****	U 6.84	0.0156	1.25	0.12
DEC 3,83	DEC 2,83	30.0	*****	*****	U 4.79	0.0402	1.65	1.21
DEC 5,83	DEC 4,83	166.0	6.6	*****	G 5.19	0.0252	0.40	0.16
DEC 6,83	DEC 5,83	539.0	14.5	3.99	4.64	0.0518	1.10	0.43
DEC 7,83	DEC 6,83	830.0	8.2	4.41	4.91	0.0336	0.70	0.13
DEC 9,83	DEC 8,83	35.0	*****	*****	4.16	0.0938	1.55	2.15
DEC 10,83	DEC 9,83	11.0	*****	*****	*****	*****	*****	*****
DEC 12,83	DEC 11,83	148.0	15.0	*****	4.72	0.0378	1.20	0.24
DEC 13,83	DEC 12,83	308.0	19.5	4.05	4.46	0.0520	2.00	0.21
DEC 15,83	DEC 14,83	91.0	*****	*****	3.87	0.1600	4.45	1.55
DEC 16,83	DEC 15,83	13.0	*****	*****	4.27	0.0858	*****	*****
DEC 18,83	DEC 17,83	42.0	*****	*****	5.00	0.0292	0.65	0.40
DEC 22,83	DEC 21,83	660.0	12.0	4.35	4.68	0.0380	0.60	0.30
DEC 23,83	DEC 22,83	196.0	U 66.0	U 6.55	U 7.49	D 0.0210	3.70	0.37
DEC 28,83	DEC 27,83	179.0	21.8	4.03	4.18	0.0846	0.50	0.94
DEC 29,83	DEC 28,83	544.0	3.8	4.66	G 5.16	0.0252	0.20	0.14

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
NOV 17,83	NOV 16,83	0.10	0.07	0.015	<T 0.015	0.025	<W 0.002	0.0263
NOV 19,83	NOV 18,83	0.53	0.38	0.045	0.050	0.145	0.364	0.0537
NOV 21,83	NOV 20,83	0.16	0.23	0.025	0.025	0.100	0.238	0.0479
NOV 22,83	NOV 21,83	*****	0.50	*****	*****	*****	*****	0.0245
NOV 24,83	NOV 23,83	0.69	0.44	0.050	0.065	0.155	0.310	0.1298
NOV 29,83	NOV 28,83	0.13	0.11	0.020	0.020	0.050	0.156	0.0525
NOV 30,83	NOV 29,83	0.24	0.21	0.035	0.030	0.060	0.258	0.0525
DEC 1,83	NOV 30,83	*****	0.54	*****	*****	*****	*****	U 0.0000
DEC 2,83	DEC 1,83	*****	0.59	*****	*****	*****	*****	U 0.0001
DEC 3,83	DEC 2,83	*****	B 1.17	*****	*****	*****	*****	0.0162
DEC 5,83	DEC 4,83	0.14	0.13	0.025	0.020	0.050	0.020	0.0065
DEC 6,83	DEC 5,83	0.17	0.16	0.015	0.040	0.050	0.192	0.0229
DEC 7,83	DEC 6,83	0.08	0.07	0.010	<T 0.010	0.030	0.010	0.0123
DEC 9,83	DEC 8,83	*****	B 2.00	*****	*****	*****	*****	0.0692
DEC 10,83	DEC 9,83	*****	*****	*****	*****	*****	*****	*****
DEC 12,83	DEC 11,83	0.23	0.27	0.030	0.040	0.200	*****	0.0191
DEC 13,83	DEC 12,83	0.21	0.13	0.020	0.030	0.075	0.064	0.0347
DEC 15,83	DEC 14,83	0.49	0.62	0.075	0.055	0.250	*****	0.1349
DEC 16,83	DEC 15,83	*****	*****	*****	*****	*****	*****	0.0537
DEC 18,83	DEC 17,83	*****	0.60	*****	*****	*****	*****	0.0100
DEC 22,83	DEC 21,83	0.06	0.07	0.010	<W 0.005	0.030	0.066	0.0209
DEC 23,83	DEC 22,83	*****	U 0.72	*****	*****	*****	*****	U 0.0000
DEC 28,83	DEC 27,83	0.29	0.52	0.035	0.020	0.130	<T 0.002	0.0661
DEC 29,83	DEC 28,83	D 0.32	0.06	0.010	<W 0.005	0.030	0.010	G 0.0069

PART V

SOUTHEASTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
				01-STD. 02-NIPHER				02-APIOS 03-SPECIAL	01-HOE 03-AES		
JAN 6,83	JAN 5,83	900 900	1800 400	3	0.8	2	23362	2	1	31	N
JAN 7,83	JAN 6,83	900 1100	200 1100	3	3.3	2	23363	2	1	13	N
JAN 8,83	JAN 7,83	1100 1100	1100 2000	3	0.4	2	23364	2	1	148	N
JAN 11,83	JAN 10,83	900 920	930 920	1	26.0	2	23365	2	1	95	
JAN 12,83	JAN 11,83	920 745	2400 600	2	2.7	2	23366	2	1	52	
JAN 13,83	JAN 12,83	745 910	930 1300	2	0.9	2	23367	2	1	***	EF
JAN 24,83	JAN 23,83	800 900	1000 900	3	10.0	2	23368	2	1	70	
JAN 25,83	JAN 24,83	900 1015	900 1015	3	0.1	2	23369	2	1	U 218	P
JAN 31,83	JAN 30,83	900 900	1000 800	3	4.9	2	23370	2	1	55	
FEB 3,83	FEB 2,83	900 1000	900 600	1	43.3	2	23371	2	1	101	
FEB 5,83	FEB 4,83	900 1000	1100 1700	3	5.3	2	23372	2	1	40	N
FEB 8,83	FEB 7,83	900 900	1000 400	2	11.1	2	23373	2	1	49	N
FEB 23,83	FEB 22,83	800 900	1800 700	3	16.8	2	23374	2	1	105	
MAR 7,83	MAR 6,83	900 935	2300 600	1	3.0	2	23375	2	1	98	
MAR 9,83	MAR 8,83	900 915	1900 2100	1	4.3	2	23376	2	1	27	N
MAR 10,83	MAR 9,83	915 1000	2300 600	3	6.7	2	23377	2	1	60	
MAR 15,83	MAR 14,83	1330 900	30 100	1	0.5	2	23378	2	1	3	E
MAR 19,83	MAR 18,83	900 915	2000 800	1	15.4	2	23379	2	1	90	N
MAR 20,83	MAR 19,83	915 945	1300 1500	1	3.7	2	23380	2	1	61	J
MAR 21,83	MAR 20,83	945 945	***	1	0.6	2	23381	2	1	***	
MAR 22,83	MAR 21,83	945 815	1000 1600	3	19.5	2	23382	2	1	53	EF
MAR 23,83	MAR 22,83	815 830	815 1000	2	0.3	2	23383	2	1	***	EF
MAR 28,83	MAR 27,83	900 930	1200 2100	2	19.3	2	23384	2	1	37	N
MAR 29,83	MAR 28,83	930 915	1600 2100	3	0.3	2	23385	2	1	41	N
APR 3,83	APR 2,83	900 900	2400 700	3	9.0	2	23386	2	1	97	JC
APR 4,83	APR 3,83	900 1000	1100 900	1	2.3	2	23387	2	1	2	E
APR 8,83	APR 7,83	900 745	915 2200	1	4.6	2	23388	2	1	99	
APR 10,83	APR 9,83	900 1000	2100 1000	1	11.3	2	23389	2	1	81	JC
APR 15,83	APR 14,83	1000 755	1000 2300	1	6.8	2	23390	2	1	75	C
APR 16,83	APR 15,83	755 945	755 945	3	18.3	2	23392	2	1	77	
APR 20,83	APR 19,83	745 800	1300 2100	2	8.9	2	23393	2	1	48	N
APR 21,83	APR 20,83	800 750	1100 750	2	10.1	2	23394	2	1	69	NH
APR 22,83	APR 21,83	750 755	900 1400	2	0.5	2	23395	2	1	U 499	P
APR 25,83	APR 24,83	750 615	1200 615	3	5.9	2	23396	2	1	72	
APR 26,83	APR 25,83	615 815	900 1200	3	11.3	2	23397	2	1	69	JHCN
APR 29,83	APR 28,83	*** 745	***	1	2.3	2	23398	2	1	111	
MAY 1,83	APR 30,83	900 1000	1800 2400	1	11.3	2	23399	2	1	93	
MAY 2,83	MAY 1,83	1000 1200	2400 1000	1	11.3	2	23400	2	1	94	C
MAY 3,83	MAY 2,83	1200 745	1730 2130	1	6.8	2	23401	2	1	105	C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 6,83	JAN 5,83	16.0	*****	*****	4.46	0.0828	*****	*****
JAN 7,83	JAN 6,83	28.0	*****	*****	3.78	0.1996	*****	*****
JAN 8,83	JAN 7,83	38.0	*****	*****	4.50	0.0650	4.00	0.78
JAN 11,83	JAN 10,83	1598.0	10.6	4.76	4.66	0.0432	0.70	0.14
JAN 12,83	JAN 11,83	90.0	*****	*****	4.54	0.0434	0.90	0.36
JAN 13,83	JAN 12,83	*****	*****	*****	*****	*****	*****	*****
JAN 24,83	JAN 23,83	449.0	16.5	4.47	4.50	0.0568	1.05	0.30
JAN 25,83	JAN 24,83	14.0	*****	*****	4.35	0.0704	*****	*****
JAN 31,83	JAN 30,83	174.0	*****	4.06	4.03	0.1196	3.50	0.80
FEB 3,83	FEB 2,83	2826.0	14.0	4.54	4.46	0.0548	1.10	0.18
FEB 5,83	FEB 4,83	138.0	*****	4.85	4.29	0.0752	1.60	0.42
FEB 8,83	FEB 7,83	350.0	7.8	3.90	4.75	0.0466	0.35	0.14
FEB 23,83	FEB 22,83	1138.0	53.0	4.21	3.90	0.1396	3.95	0.98
MAR 7,83	MAR 6,83	190.0	29.0	4.85	4.19	0.0774	2.35	0.37
MAR 9,83	MAR 8,83	76.0	*****	*****	4.61	0.0390	0.75	0.13
MAR 10,83	MAR 9,83	258.0	10.5	4.85	4.74	0.0338	0.70	0.11
MAR 15,83	MAR 14,83	1.0	*****	*****	*****	*****	*****	*****
MAR 19,83	MAR 18,83	889.0	3.2	5.26	5.94	0.0186	0.25	0.08
MAR 20,83	MAR 19,83	146.0	5.6	*****	5.94	0.0220	0.60	0.12
MAR 21,83	MAR 20,83	*****	*****	*****	*****	*****	*****	*****
MAR 22,83	MAR 21,83	665.0	14.8	4.52	4.64	0.0434	1.45	0.10
MAR 23,83	MAR 22,83	*****	*****	*****	*****	*****	*****	*****
MAR 28,83	MAR 27,83	462.0	12.6	4.44	4.69	0.0394	1.00	0.15
MAR 29,83	MAR 28,83	8.0	*****	*****	*****	*****	*****	*****
APR 3,83	APR 2,83	562.0	6.9	4.60	5.22	0.0254	0.45	0.15
APR 4,83	APR 3,83	4.0	*****	*****	*****	*****	*****	*****
APR 8,83	APR 7,83	292.0	*****	3.93	4.02	0.1208	3.30	0.88
APR 10,83	APR 9,83	587.0	5.4	4.92	5.53	0.0180	0.35	0.04
APR 11,83	APR 10,83	331.0	6.9	4.79	5.16	0.0228	0.45	0.11
APR 15,83	APR 14,83	444.0	39.1	4.06	4.19	0.0804	3.30	0.60
APR 16,83	APR 15,83	912.0	26.9	4.18	4.31	0.0682	1.25	0.58
APR 20,83	APR 19,83	276.0	*****	5.09	5.21	0.0252	0.50	0.15
APR 21,83	APR 20,83	451.0	11.3	4.77	5.12	0.0280	1.20	0.04
APR 22,83	APR 21,83	160.0	*****	*****	5.51	0.0242	1.00	0.14
APR 25,83	APR 24,83	275.0	15.1	4.62	4.67	0.0464	1.55	0.14
APR 26,83	APR 25,83	500.0	2.8	5.15	5.78	0.1114	0.30	0.03
APR 29,83	APR 28,83	165.0	U 105.5	*****	U 3.85	U 0.2020	13.50	U 1.94
MAY 1,83	APR 30,83	676.0	42.4	4.26	4.18	0.0944	3.50	0.39
MAY 2,83	MAY 1,83	681.0	33.2	4.38	4.45	0.0624	2.90	0.30
MAY 3,83	MAY 2,83	460.0	20.8	4.54	4.67	0.0422	1.90	0.23

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE N+ LAB MG/L
JAN 6,83	JAN 5,83	*****	*****	*****	*****	*****	*****	0.0347
JAN 7,83	JAN 6,83	*****	*****	*****	*****	*****	*****	0.1660
JAN 8,83	JAN 7,83	*****	*****	*****	*****	*****	*****	0.0316
JAN 11,83	JAN 10,83	<T 0.02	0.08	0.005	<T 0.005	0.030	0.028	0.0219
JAN 12,83	JAN 11,83	<T 0.01	0.08	0.005	<T 0.010	0.040	*****	0.0288
JAN 13,83	JAN 12,83	*****	*****	*****	*****	*****	*****	*****
JAN 24,83	JAN 23,83	0.03	0.08	0.005	<W 0.005	0.020	0.112	0.0316
JAN 25,83	JAN 24,83	*****	*****	*****	*****	*****	*****	0.0447
JAN 31,83	JAN 30,83	0.09	0.13	0.025	0.110	0.030	0.600	0.0933
FEB 3,83	FEB 2,83	0.02	0.09	<T 0.005	<W 0.005	0.025	0.072	0.0347
FEB 5,83	FEB 4,83	0.04	0.09	0.005	0.010	0.020	0.228	0.0513
FEB 8,83	FEB 7,83	0.06	0.08	0.015	<T 0.005	0.020	0.008	0.0178
FEB 23,83	FEB 22,83	0.06	0.17	0.015	0.020	0.035	0.730	0.1259
MAR 7,83	MAR 6,83	0.13	0.24	0.035	0.020	0.150	0.234	0.0646
MAR 9,83	MAR 8,83	0.08	0.09	0.010	<T 0.005	0.050	*****	0.0245
MAR 10,83	MAR 9,83	0.09	0.07	0.015	<T 0.005	0.035	0.068	0.0182
MAR 15,83	MAR 14,83	*****	*****	*****	*****	*****	*****	*****
MAR 19,83	MAR 18,83	0.04	0.07	0.010	<T 0.005	0.045	0.132	G 0.0011
MAR 20,83	MAR 19,83	0.10	0.26	0.030	0.030	0.160	0.216	G 0.0011
MAR 21,83	MAR 20,83	*****	*****	*****	*****	*****	*****	*****
MAR 22,83	MAR 21,83	0.13	<T 0.01	0.025	0.015	0.010	0.090	0.0229
MAR 23,83	MAR 22,83	*****	*****	*****	*****	*****	*****	*****
MAR 28,83	MAR 27,83	0.06	<W 0.10	0.005	0.010	0.015	0.066	0.0204
MAR 29,83	MAR 28,83	*****	*****	*****	*****	*****	*****	*****
APR 3,83	APR 2,83	0.12	0.02	0.025	0.015	0.020	0.078	0.0060
APR 4,83	APR 3,83	*****	*****	*****	*****	*****	*****	*****
APR 8,83	APR 7,83	0.15	0.09	0.020	0.030	0.040	0.204	0.0955
APR 10,83	APR 9,83	0.04	0.02	0.010	0.020	0.030	0.032	G 0.0030
APR 11,83	APR 10,83	0.05	0.03	0.010	0.030	0.030	0.038	0.0069
APR 15,83	APR 14,83	0.28	0.31	0.040	0.040	0.170	0.246	0.0646
APR 16,83	APR 15,83	0.06	0.06	0.010	0.030	0.040	0.088	0.0490
APR 20,83	APR 19,83	0.20	0.18	0.055	0.015	0.080	0.030	0.0062
APR 21,83	APR 20,83	0.04	0.03	0.020	0.035	0.020	0.066	0.0076
APR 22,83	APR 21,83	0.05	0.03	0.015	0.020	0.005	0.290	G 0.0031
APR 25,83	APR 24,83	0.04	0.02	0.015	0.030	<W 0.095	0.146	0.0214
APR 26,83	APR 25,83	0.04	<T 0.01	0.015	0.015	<W 0.005	0.018	G 0.0017
APR 29,83	APR 28,83	U 2.05	U 0.47	U 0.305	U 0.130	U 0.165	U 2.400	U 0.1413
MAY 1,83	APR 30,83	0.13	0.10	0.025	0.035	0.050	0.420	0.0661
MAY 2,83	MAY 1,83	0.11	0.10	0.030	0.040	0.100	0.490	0.0355
MAY 3,83	MAY 2,83	0.35	0.05	0.035	0.030	0.045	0.192	0.0214

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SHOW 03-COMP/04-OTHER	GAUGE DEPTH(INH)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-HOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
MAY 4,83	MAY 3,83	745 745	2300 500	1	6.6	1	23402	2	1	88	
MAY 5,83	MAY 4,83	745 745	745 900	1	2.4	1	23403	2	1	10	N
MAY 8,83	MAY 7,83	900 1000	500 1000	1	12.7	1	23404	2	1	56	
MAY 9,83	MAY 8,83	1000 1000	1000 2100	1	6.8	1	23405	2	1	84	
MAY 15,83	MAY 14,83	900 900	300 600	1	6.2	1	23406	2	1	89	
MAY 20,83	MAY 19,83	900 800	1700 300	1	12.5	1	23407	2	1	78	
MAY 23,83	MAY 22,83	900 900	1700 500	1	4.8	1	23408	2	1	60	
MAY 30,83	MAY 29,83	800 800	200 800	1	7.6	1	23410	2	1	78	J
MAY 31,83	MAY 30,83	800 800	800 930	1	3.8	1	23411	2	1	57	
JUN 4,83	JUN 3,83	800 900	300 900	1	2.5	1	23412	2	1	21	N
JUN 7,83	JUN 6,83	900 830	930 1830	1	4.2	1	23413	2	1	54	
JUN 26,83	JUN 25,83	900 800	1800 500	1	7.0	1	23409	2	1	86	
JUL 3,83	JUL 2,83	800 1000	945 1030	1	10.7	1	23418	2	1	103	
JUL 5,83	JUL 4,83	800 745	2145 2230	1	1.4	1	23419	2	1	45	
JUL 9,83	JUL 8,83	800 1100	1900 2230	1	1.0	1	23420	2	1	6	N
JUL 21,83	JUL 20,83	800 800	1800 2000	1	0.4	1	23421	2	1	19	N
JUL 30,83	JUL 29,83	800 740	830 1200	1	6.5	1	23422	2	1	84	N
AUG 1,83	JUL 31,83	800 1000	1100 400	1	27.8	1	23423	2	1	95	
AUG 7,83	AUG 6,83	800 1000	2000 2200	1	1.2	1	23426	2	1	7	M
AUG 9,83	AUG 8,83	800 800	1800 2200	1	2.0	1	23427	2	1	48	N
AUG 12,83	AUG 11,83	800 1000	1200 2100	1	3.4	1	23428	2	1	47	N
AUG 18,83	AUG 17,83	800 900	100 600	1	2.8	1	23429	2	1	92	N
AUG 20,83	AUG 19,83	800 900	1730 2230	1	1.0	1	23430	2	1	20	N
AUG 22,83	AUG 21,83	900 900	100 900	1	5.8	1	23431	2	1	121	N
AUG 28,83	AUG 27,83	800 715	1600 2130	1	23.6	1	23432	2	1	90	
AUG 31,83	AUG 30,83	800 730	1830 2400	1	12.2	1	23435	2	1	87	
SEP 7,83	SEP 6,83	800 745	1445 1515	1	0.7	1	23437	2	1	EF	
SEP 10,83	SEP 9,83	800 830	2200 400	1	1.7	1	23438	2	1	42	N
SEP 11,83	SEP 10,83	830 900	1930 2300	1	1.6	1	23439	2	1	128	N
SEP 17,83	SEP 16,83	800 930	1900 900	1	5.6	1	23440	2	1	67	N
SEP 18,83	SEP 17,83	930 930	1500 1700	1	1.2	1	23441	2	1	41	N
SEP 19,83	SEP 18,83	900 755	1200 600	1	1.8	1	23442	2	1	94	
SEP 22,83	SEP 21,83	800 900	1230 1800	1	23.8	1	23443	2	1	101	J
SEP 23,83	SEP 22,83	900 900	1800 2000	1	5.0	1	23444	2	1	91	JHM
SEP 24,83	SEP 23,83	900 900	1400 1900	1	3.5	1	23445	2	1	72	N
OCT 4,83	OCT 3,83	800 800	2400 500	1	2.1	1	23446	2	1	10	
OCT 5,83	OCT 4,83	800 800	2400 800	1	19.3	1	23447	2	1	90	
OCT 6,83	OCT 5,83	800 745	600 500	1	34.4	1	23450	2	1	96	
OCT 9,83	OCT 8,83	800 1000	1200 1800	1	9.6	1	23451	2	1	71	
OCT 12,83	OCT 11,83	800 745	2400 530	1	1.0	1	23452	2	1	104	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	VOLUME HL	CONDUCT. UMHIO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 NG/L	SULPHATE NG/L	NITRATE AS N NG/L
MAY 4,83	MAY 3,83	376.0	42.1	4.11	4.13	0.1046	3.80	0.58
MAY 5,83	MAY 4,83	16.0	*****	*****	B 5.46	0.0254	*****	*****
MAY 8,83	MAY 7,83	458.0	*****	4.28	4.33	0.0750	*****	*****
MAY 9,83	MAY 8,83	368.0	*****	4.45	4.58	*****	*****	*****
MAY 15,83	MAY 14,83	355.0	21.5	4.48	4.46	0.0606	1.90	0.21
MAY 20,83	MAY 19,83	632.0	20.9	4.49	4.47	0.0576	1.90	0.30
MAY 23,83	MAY 22,83	187.0	*****	4.80	*****	0.0200	D 0.70	0.12
MAY 30,83	MAY 29,83	383.0	35.1	6.42	4.23	0.0930	3.65	0.41
MAY 31,83	MAY 30,83	140.0	*****	*****	4.29	0.0836	3.00	0.43
JUN 4,83	JUN 3,83	35.0	*****	*****	5.04	*****	1.20	0.25
JUN 7,83	JUN 6,83	147.0	*****	*****	4.05	0.1296	5.30	0.51
JUN 26,83	JUN 25,83	386.0	32.0	4.23	4.25	0.0832	2.40	0.52
JUL 3,83	JUL 2,83	708.0	36.3	4.15	4.31	0.0832	4.05	0.77
JUL 5,83	JUL 4,83	41.0	*****	*****	3.93	0.1552	6.85	0.67
JUL 9,83	JUL 8,83	4.0	*****	*****	*****	*****	*****	*****
JUL 22,83	JUL 21,83	5.0	61.5	3.93	4.13	0.1384	6.75	0.84
JUL 30,83	JUL 29,83	350.0	40.4	4.11	4.27	0.1004	3.80	0.39
AUG 1,83	JUL 31,83	1706.0	*****	*****	*****	*****	*****	*****
AUG 7,83	AUG 6,83	6.0	*****	*****	G 5.94	0.0332	D 6.00	1.37
AUG 9,83	AUG 8,83	62.0	*****	*****	4.47	0.0676	2.60	0.18
AUG 12,83	AUG 11,83	103.0	24.5	*****	3.80	0.2040	7.45	0.92
AUG 18,83	AUG 17,83	166.0	86.0	*****	*****	*****	*****	*****
AUG 20,83	AUG 19,83	13.0	*****	*****	4.32	*****	3.10	0.25
AUG 22,83	AUG 21,83	452.0	30.6	4.11	4.57	0.0578	2.50	0.22
AUG 28,83	AUG 27,83	1363.0	21.0	4.29	4.79	0.0416	1.45	0.38
AUG 31,83	AUG 30,83	688.0	15.5	4.48	*****	*****	*****	*****
SEP 7,83	SEP 6,83	*****	*****	*****	*****	*****	6.50	1.08
SEP 10,83	SEP 9,83	46.0	*****	*****	4.30	0.0824	4.35	0.75
SEP 11,83	SEP 10,83	132.0	38.0	*****	4.30	*****	3.50	0.78
SEP 17,83	SEP 16,83	243.0	49.4	3.88	*****	*****	6.50	1.17
SEP 18,83	SEP 17,83	32.0	*****	*****	*****	*****	5.00	0.70
SEP 19,83	SEP 18,83	109.0	45.8	3.78	4.55	0.0468	1.90	0.16
SEP 22,83	SEP 21,83	1550.0	14.5	5.38	7.12	0.0150	0.75	0.22
SEP 23,83	SEP 22,83	293.0	5.0	*****	U 7.16	0.0144	0.15	0.09
SEP 24,83	SEP 23,83	163.0	2.5	*****	*****	*****	*****	*****
OCT 4,83	OCT 3,83	14.0	*****	*****	D 4.26	0.0768	3.55	0.49
OCT 5,83	OCT 4,83	1123.0	30.0	*****	4.54	0.0692	1.70	0.17
OCT 6,83	OCT 5,83	2133.0	15.6	4.18	4.76	0.0386	1.05	0.14
OCT 9,83	OCT 8,83	443.0	10.2	4.38	4.76	0.0364	1.20	0.10
OCT 12,83	OCT 11,83	67.0	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 4,83	MAY 3,83	0.16	0.12	0.030	0.075	0.090	0.520	0.0741
MAY 5,83	MAY 4,83	0.11	0.07	0.020	0.035	0.015	0.210	0.0035
MAY 8,83	MAY 7,83	0.20	0.12	0.035	0.040	0.050	0.350	0.0468
MAY 9,83	MAY 8,83	0.11	0.07	0.020	0.035	0.015	0.360	0.0263
MAY 15,83	MAY 14,83	0.11	0.07	0.020	0.035	0.015	0.360	0.0347
MAY 20,83	MAY 19,83	0.20	0.12	0.035	0.040	0.050	0.360	0.0339
MAY 23,83	MAY 22,83	0.10	0.05	0.020	0.050	0.015	0.360	0.0589
MAY 30,83	MAY 29,83	0.07	0.09	0.020	0.030	0.030	0.480	0.0589
MAY 31,83	MAY 30,83	0.28	0.11	0.060	0.080	0.090	0.280	0.0513
JUN 4,83	JUN 3,83	0.24	0.09	0.045	0.025	0.020	0.460	0.0091
JUN 7,83	JUN 6,83	0.07	0.10	0.020	0.010	0.020	0.240	0.0891
JUN 26,83	JUN 25,83	0.32	0.13	0.055	0.040	0.045	0.830	0.0562
JUL 3,83	JUL 2,83	0.32	0.37	0.055	0.040	0.045	0.830	0.0490
JUL 5,83	JUL 4,83	0.47	0.18	0.050	0.055	0.065	0.910	0.1175
JUL 9,83	JUL 8,83	0.10	0.09	0.010	0.015	0.010	0.274	0.0741
JUL 22,83	JUL 21,83	0.10	0.09	0.010	0.015	0.010	0.274	0.0537
JUL 30,83	JUL 29,83	0.10	0.09	0.010	0.015	0.010	0.274	0.0537
AUG 1,83	JUL 31,83	0.10	0.09	0.010	0.015	0.010	0.274	0.0537
AUG 7,83	AUG 6,83	0.17	0.07	0.020	0.025	0.010	0.800	0.0011
AUG 9,83	AUG 8,83	0.24	0.13	0.040	0.010	0.020	0.072	0.0339
AUG 12,83	AUG 11,83	0.14	0.03	0.050	0.030	0.030	0.254	0.1585
AUG 20,83	AUG 19,83	0.11	0.03	0.010	0.040	0.030	0.450	0.0479
AUG 28,83	AUG 27,83	0.36	0.06	0.040	0.035	0.010	0.310	0.0269
AUG 31,83	AUG 30,83	0.14	0.03	0.050	0.030	0.030	0.530	0.0162
SEP 7,83	SEP 6,83	0.81	0.31	0.160	0.070	0.135	0.500	0.0501
SEP 10,83	SEP 9,83	0.16	0.19	0.045	0.020	0.200	0.326	0.0501
SEP 17,83	SEP 16,83	0.72	0.21	0.105	0.080	0.045	0.550	0.0501
SEP 18,83	SEP 17,83	0.18	0.16	0.020	0.030	0.105	0.098	0.0202
SEP 22,83	SEP 21,83	0.42	0.13	0.025	0.020	0.005	0.234	0.0001
SEP 23,83	SEP 22,83	0.26	0.03	0.025	0.020	0.005	0.114	0.0001
SEP 24,83	SEP 23,83	0.32	0.01	0.045	0.040	0.005	0.470	0.0550
OCT 5,83	OCT 3,83	0.04	0.08	0.005	0.005	0.005	0.210	0.0288
OCT 9,83	OCT 8,83	0.05	0.01	0.005	0.015	0.005	0.144	0.0174
OCT 12,83	OCT 11,83	0.05	1.44	0.005	0.015	0.005	0.144	0.0174

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11														PAGE : 7	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE				
OCT 13,83	OCT 12,83	745 800	1430 600	1	12.1	1	23453	2	1	87	C				
OCT 14,83	OCT 13,83	800 1000	2100 300	1	10.0	1	23454	2	1	92	J				
OCT 24,83	OCT 23,83	800 745	900 2030	1	17.0	1	23455	2	1	96	C				
OCT 26,83	OCT 25,83	800 800	100 800	1	2.6	1	23456	2	1	66	N				
OCT 27,83	OCT 26,83	800 755	800 755	1	2.4	1	23457	2	1	38					
NOV 3,83	NOV 2,83	800 820	1200 820	1	15.6	1	23458	2	1	85					
NOV 4,83	NOV 3,83	820 830	820 1000	3	****	1	23459	2	1	****					
NOV 5,83	NOV 4,83	830 1000	830 2130	3	15.2	1	23460	2	1	91	JHM				
NOV 7,83	NOV 6,83	1000 800	****	1	0.2	1	23461	2	1	****	EF				
NOV 10,83	NOV 9,83	800 1000	****	1	0.6	1	23462	2	1	****	E				
NOV 11,83	NOV 10,83	1000 800	1900 800	1	14.0	1	23463	2	1	72	C				
NOV 12,83	NOV 11,83	800 845	1600 200	3	6.4	1	23464	2	1	****	E				
NOV 13,83	NOV 12,83	845 815	****	2	****	*	23465	2	1	****					
NOV 16,83	NOV 15,83	900 910	1000 910	3	28.6	1	23467	2	1	97					
NOV 17,83	NOV 16,83	910 830	910 830	3	6.1	1	23470	2	1	28	F				
NOV 21,83	NOV 20,83	900 830	****	1	19.6	1	23471	2	1	100	J				
NOV 29,83	NOV 28,83	900 815	1000 400	1	12.6	2	23472	2	1	88					
DEC 3,83	DEC 2,83	830 930	1530 400	2	1.4	2	23474	2	1	****	EF				
DEC 5,83	DEC 4,83	900 900	930 2100	2	11.0	2	23475	2	1	52	C				
DEC 6,83	DEC 5,83	900 830	2100 830	3	5.0	2	23476	2	1	37	N				
DEC 7,83	DEC 6,83	830 930	830 900	3	17.6	2	23477	2	1	41	N				
DEC 10,83	DEC 9,83	900 840	930 1830	2	6.8	2	23478	2	1	63					
DEC 12,83	DEC 11,83	900 925	200 2100	1	29.9	1	23479	2	1	99					
DEC 15,83	DEC 13,83	925 1030	****	1	21.0	2	23480	2	1	93	HCHY2				
DEC 16,83	DEC 15,83	1030 1050	1100 600	2	1.5	2	23481	2	1	88					
DEC 22,83	DEC 21,83	900 1030	100 1030	3	21.9	2	23482	2	1	82	H				
DEC 23,83	DEC 22,83	1030 930	1030 2330	3	10.5	2	23483	2	1	103					
DEC 27,83	DEC 26,83	900 930	1530 930	2	2.1	2	23484	2	1	5	N				
DEC 28,83	DEC 27,83	930 945	930 945	2	1.9	2	23485	2	1	3	N				
DEC 29,83	DEC 28,83	945 930	945 300	2	14.0	2	23486	2	1	82	C				

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 13,83	OCT 12,83	677.0	4.8	4.79	G 5.34	0.0218	0.15	0.05
OCT 14,83	OCT 13,83	596.0	7.5	4.40	4.95	0.0300	0.50	0.11
OCT 24,83	OCT 23,83	1055.0	8.0	4.74	5.00	0.0286	0.55	0.11
OCT 26,83	OCT 25,83	111.0	22.8	*****	4.47	0.0564	1.75	0.50
OCT 27,83	OCT 26,83	59.0	*****	*****	4.79	0.0418	1.55	0.15
NOV 3,83	NOV 2,83	852.0	30.6	3.81	4.22	0.0920	3.05	0.60
NOV 4,83	NOV 3,83	250.0	17.1	4.10	4.55	0.0522	1.90	0.21
NOV 5,83	NOV 4,83	893.0	6.4	4.55	5.30	0.0244	0.45	0.90
NOV 7,83	NOV 6,83	*****	*****	*****	*****	*****	*****	*****
NOV 10,83	NOV 9,83	*****	*****	*****	*****	*****	*****	*****
NOV 11,83	NOV 10,83	654.0	6.9	4.60	5.06	0.0244	0.60	0.05
NOV 12,83	NOV 11,83	*****	*****	*****	*****	*****	*****	*****
NOV 13,83	NOV 12,83	428.0	9.8	4.52	4.83	0.0316	1.00	0.06
NOV 16,83	NOV 15,83	1795.0	6.9	4.70	5.04	0.0240	0.45	0.10
NOV 17,83	NOV 16,83	113.0	16.6	*****	4.86	0.0346	2.05	0.39
NOV 21,83	NOV 20,83	1266.0	14.5	4.39	4.58	0.0428	1.15	0.25
NOV 29,83	NOV 28,83	715.0	15.0	3.85	4.51	0.0460	1.25	0.25
DEC 3,83	DEC 2,83	*****	*****	*****	*****	*****	*****	*****
DEC 5,83	DEC 4,83	368.0	6.0	*****	5.27	0.0242	0.50	0.09
DEC 6,83	DEC 5,83	120.0	60.7	*****	3.90	0.1490	4.05	1.16
DEC 7,83	DEC 6,83	469.0	47.4	*****	4.02	0.1198	4.15	0.87
DEC 10,83	DEC 9,83	278.0	40.7	*****	4.06	0.1148	1.95	1.15
DEC 12,83	DEC 11,83	1911.0	9.0	*****	4.88	0.0280	0.65	0.08
DEC 15,83	DEC 13,83	1259.0	1.6	*****	4.71	0.0334	0.05	0.01
DEC 16,83	DEC 15,83	85.0	*****	*****	3.94	0.1406	1.75	1.65
DEC 22,83	DEC 21,83	1152.0	7.2	*****	4.92	0.0258	0.55	0.08
DEC 23,83	DEC 22,83	697.0	11.3	*****	4.76	0.0320	1.35	0.14
DEC 27,83	DEC 26,83	7.0	*****	*****	*****	*****	*****	*****
DEC 28,83	DEC 27,83	4.0	*****	*****	*****	*****	*****	*****
DEC 29,83	DEC 28,83	737.0	8.6	*****	5.12	0.0244	0.60	0.30

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 13,83	OCT 12,83							
OCT 14,83	OCT 13,83	D	<W	<T	<T	0.105	9.016	G 0.0046
OCT 24,83	OCT 23,83	0.05	<T	<W	0.035	0.005	D 0.048	0.0112
OCT 26,83	OCT 25,83	0.39	0.29	0.005	0.010	0.035	0.074	0.0100
OCT 27,83	OCT 26,83	*****	*****	0.075	0.020	0.175	0.102	0.0339
NOV 3,83	NOV 2,83	0.18	<T	0.040	0.025	0.055	0.400	0.0162
NOV 4,83	NOV 3,83	0.16	<W	0.015	<T	0.030	0.122	0.0603
NOV 5,83	NOV 4,83	0.16	<W	0.040	<T	0.035	0.032	0.0282
NOV 7,83	NOV 6,83	*****	*****	*****	*****	*****	0.0050	0.0050
NOV 10,83	NOV 9,83	*****	*****	*****	*****	*****	*****	*****
NOV 11,83	NOV 10,83	0.08	0.07	0.010	<T	0.025	0.014	0.0087
NOV 12,83	NOV 11,83	*****	*****	*****	*****	*****	*****	*****
NOV 13,83	NOV 12,83	0.12	0.10	0.010	0.035	0.055	0.026	0.0148
NOV 16,83	NOV 15,83	0.06	0.06	0.005	<W	0.020	0.046	0.0091
NOV 17,83	NOV 16,83	0.13	0.15	0.015	0.025	0.065	0.590	0.0138
NOV 21,83	NOV 20,83	D	0.09	0.005	0.020	0.030	0.150	0.0263
NOV 29,83	NOV 28,83	0.06	0.04	0.005	<T	0.025	0.070	0.0309
DEC 3,83	DEC 2,83	*****	*****	*****	*****	*****	*****	*****
DEC 5,83	DEC 4,83	0.10	0.05	0.010	<T	0.060	0.038	0.0054
DEC 6,83	DEC 5,83	0.12	0.12	0.010	<T	0.045	0.324	0.1259
DEC 7,83	DEC 6,83	0.09	0.11	0.005	<T	0.025	0.290	0.0955
DEC 10,83	DEC 9,83	0.07	0.28	0.010	<T	0.050	0.450	0.0871
DEC 12,83	DEC 11,83	0.05	0.11	0.005	<W	0.045	0.008	0.0132
DEC 15,83	DEC 14,83	<W	<W	0.005	<T	0.020	0.036	0.0195
DEC 16,83	DEC 15,83	*****	0.25	*****	*****	*****	0.036	0.1148
DEC 22,83	DEC 21,83	<T	0.03	<T	<W	0.010	0.014	0.0120
DEC 23,83	DEC 22,83	0.07	0.05	0.030	<W	0.175	0.026	0.0174
DEC 27,83	DEC 26,83	*****	*****	*****	*****	*****	*****	*****
DEC 28,83	DEC 27,83	*****	*****	*****	*****	*****	*****	*****
DEC 29,83	DEC 28,83	0.31	0.06	0.030	0.030	0.050	0.058	0.0076

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10										PAGE : 1	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-HOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
JAN 7.83	JAN 6.83	800 800	2100 800	3	4.1	2	23919	2	1	21	N
JAN 8.83	JAN 7.83	800 800	800 2100	1	***	2	23921	2	1	***	
JAN 11.83	JAN 10.83	800 800	1000 800	1	34.1	2	23923	2	1	20	N
JAN 12.83	JAN 11.83	800 800	800 800	3	1.8	2	23925	2	1	***	EF
JAN 15.83	JAN 14.83	800 800	1900 630	2	3.9	2	23927	2	1	***	EF
JAN 24.83	JAN 23.83	800 800	1200 800	2	7.0	2	23929	2	1	***	EF
JAN 26.83	JAN 25.83	800 800	830 1900	3	1.3	2	23932	2	1	***	FE
JAN 31.83	JAN 30.83	800 800	1730 500	3	5.7	2	23934	2	1	***	EF
FEB 3.83	FEB 2.83	800 800	830 200	1	42.5	2	23935	2	1	***	EF
FEB 7.83	FEB 6.83	800 800	2000 600	2	9.3	2	23937	2	1	***	EF
MAR 3.83	MAR 2.83	800 800	1630 2030	1	0.2	2	23939	2	1	234	N
MAR 4.83	MAR 3.83	800 800	100 500	2	1.1	2	23941	2	1	***	P
MAR 5.83	MAR 4.83	800 800	1600 1930	1	2.5	2	23943	2	1	16	N
MAR 7.83	MAR 6.83	800 800	***	1	***	2	23945	2	1	***	G
MAR 9.83	MAR 8.83	800 800	1430 2300	1	4.7	2	23948	2	1	92	C
MAR 10.83	MAR 9.83	800 800	200 530	1	2.3	2	23950	2	1	118	
MAR 11.83	MAR 10.83	800 800	1800 800	3	2.2	2	23952	2	1	24	N
MAR 20.83	MAR 18.83	800 800	***	1	16.6	2	23954	2	1	110	JY2
MAR 22.83	MAR 21.83	800 800	***	2	14.4	2	23956	2	1	***	EF
MAR 28.83	MAR 27.83	800 800	***	2	30.3	2	23958	2	1	***	EF
APR 3.83	APR 2.83	800 800	100 630	2	9.7	2	23959	2	1	73	J
APR 4.83	APR 3.83	800 800	800 800	1	2.3	2	23961	2	1	100	H
APR 8.83	APR 7.83	800 800	830 1500	1	6.3	2	23963	2	1	104	
APR 10.83	APR 9.83	800 800	2000 800	1	***	2	23965	2	1	***	CH
APR 11.83	APR 10.83	800 800	800 2400	1	4.4	2	23967	2	1	96	
APR 15.83	APR 14.83	800 800	200 800	1	7.7	2	23969	2	1	109	
APR 16.83	APR 15.83	800 800	2000 430	1	7.7	2	23971	2	1	54	
APR 20.83	APR 19.83	800 800	***	2	3.8	2	23974	2	1	***	EF
APR 21.83	APR 20.83	800 800	1500 2000	2	9.4	2	23975	2	1	65	
APR 25.83	APR 24.83	800 800	1330 2300	1	1.2	2	23977	2	1	171	N
APR 26.83	APR 25.83	800 800	830 2300	3	9.9	2	23979	2	1	71	
APR 29.83	APR 28.83	800 800	1930 2130	1	0.3	2	23981	2	1	265	N
MAY 1.83	MAY 30.83	800 800	1230 1830	1	13.1	2	23983	2	1	116	
MAY 2.83	MAY 1.83	800 800	200 800	1	18.6	2	23985	2	1	106	
MAY 3.83	MAY 2.83	800 800	1800 2200	1	8.6	2	23987	2	1	101	A
MAY 4.83	MAY 3.83	800 800	1900 100	1	7.8	2	23989	2	1	103	
MAY 5.83	MAY 4.83	800 800	900 1100	1	1.5	2	23991	2	1	106	
MAY 9.83	MAY 7.83	800 800	***	1	22.1	2	23994	2	1	105	
MAY 15.83	MAY 14.83	800 800	100 300	1	5.6	1	23996	2	1	106	Y2
MAY 20.83	MAY 19.83	800 800	1600 200	1	17.4	1	23997	2	1	95	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10

PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7.83	JAN 6.83	56.0	*****	*****	3.69	0.2500	9.95	2.10
JAN 8.83	JAN 7.83	200.0	52.0	4.10	4.10	0.1286	4.65	1.04
JAN 11.83	JAN 10.83	450.0	11.9	4.66	4.59	0.0472	0.75	0.16
JAN 12.83	JAN 11.83	*****	*****	*****	*****	*****	*****	*****
JAN 15.83	JAN 14.83	*****	*****	*****	*****	*****	*****	*****
JAN 24.83	JAN 23.83	*****	*****	*****	*****	*****	*****	*****
JAN 26.83	JAN 25.83	*****	*****	*****	*****	*****	*****	*****
JAN 31.83	JAN 30.83	*****	*****	*****	*****	*****	*****	*****
FEB 3.83	FEB 2.83	*****	*****	*****	*****	*****	*****	*****
FEB 7.83	FEB 6.83	*****	*****	*****	*****	*****	*****	*****
MAR 3.83	MAR 2.83	30.0	*****	*****	4.47	0.0576	3.60	0.36
MAR 4.83	MAR 3.83	*****	*****	*****	*****	*****	*****	*****
MAR 5.83	MAR 4.83	27.0	*****	*****	4.47	0.0698	3.85	0.83
MAR 7.83	MAR 6.83	57.0	*****	*****	3.99	0.1256	6.40	0.60
MAR 9.83	MAR 8.83	280.0	21.0	4.40	4.62	0.0534	1.35	0.39
MAR 10.83	MAR 9.83	175.0	43.2	4.01	4.06	*****	2.80	0.72
MAR 11.83	MAR 10.83	35.0	*****	4.45	*****	0.0326	0.90	0.22
MAR 20.83	MAR 18.83	1173.0	10.2	*****	4.97	*****	*****	*****
MAR 22.83	MAR 21.83	*****	*****	*****	*****	*****	*****	*****
MAR 28.83	MAR 27.83	*****	*****	*****	*****	*****	*****	*****
APR 3.83	APR 2.83	457.0	13.6	4.41	4.89	0.0334	1.30	0.31
APR 4.83	APR 3.83	148.0	31.5	*****	*****	*****	5.15	1.14
APR 8.83	APR 7.83	422.0	105.0	3.59	3.69	0.2420	8.70	1.57
APR 10.83	APR 9.83	1371.0	8.8	4.70	5.20	0.0208	0.55	0.09
APR 11.83	APR 10.83	273.0	20.5	4.26	4.61	0.0444	2.25	0.29
APR 15.83	APR 14.83	542.0	*****	3.87	4.09	0.1066	4.75	0.82
APR 16.83	APR 15.83	271.0	50.0	3.90	4.02	0.2340	3.25	1.01
APR 20.83	APR 19.83	*****	*****	*****	*****	*****	*****	*****
APR 21.83	APR 20.83	394.0	11.5	4.83	4.76	0.0330	1.25	0.05
APR 25.83	APR 24.83	132.0	*****	*****	4.43	0.0652	5.60	0.65
APR 26.83	APR 25.83	453.0	3.8	5.22	5.30	0.0246	0.30	0.04
APR 29.83	APR 28.83	51.0	*****	*****	3.65	0.3380	23.50	3.70
MAY 1.83	APR 30.83	975.0	39.4	4.21	4.16	0.1148	3.95	0.41
MAY 2.83	MAY 1.83	1272.0	32.3	4.38	4.33	0.0748	3.40	0.37
MAY 3.83	MAY 2.83	562.0	24.0	4.49	4.45	0.0576	2.55	0.32
MAY 6.83	MAY 5.83	516.0	32.6	4.43	4.30	0.0776	3.25	0.44
MAY 9.83	MAY 8.83	102.0	*****	*****	4.42	0.0662	3.75	0.65
MAY 15.83	MAY 14.83	1491.0	37.6	4.42	4.24	0.0872	4.00	0.61
MAY 15.83	MAY 14.83	382.0	37.7	4.30	4.20	0.0944	3.65	0.37
MAY 20.83	MAY 19.83	1066.0	27.9	4.46	4.36	0.0722	2.50	0.34

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM				#10	PAGE : 3			
REMOVAL DATE	EXPOSURE DATE	CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM	FREE H+ LAB
		MG/L	MG/L	MG/L	MG/L	MG/L	AS N MG/L	MG/L
JAN 7,83	JAN 6,83	*****	0.54	*****	*****	*****	*****	0.2042
JAN 8,83	JAN 7,83	0.12	0.27	0.050	0.050	0.075	1.000	0.0794
JAN 11,83	JAN 10,83	<T	0.12	0.005	<T	0.010	0.054	0.0257
JAN 12,83	JAN 11,83	*****	*****	*****	*****	*****	*****	*****
JAN 15,83	JAN 14,83	*****	*****	*****	*****	*****	*****	*****
JAN 24,83	JAN 23,83	*****	*****	*****	*****	*****	*****	*****
JAN 26,83	JAN 25,83	*****	*****	*****	*****	*****	*****	*****
JAN 31,83	JAN 30,83	*****	*****	*****	*****	*****	*****	*****
FEB 3,83	FEB 2,83	*****	*****	*****	*****	*****	*****	*****
FEB 7,83	FEB 6,83	*****	*****	*****	*****	*****	*****	*****
MAR 3,83	MAR 2,83	*****	0.35	*****	*****	*****	*****	*****
MAR 4,83	MAR 3,83	*****	*****	*****	*****	*****	*****	0.0339
MAR 5,83	MAR 4,83	*****	0.86	*****	*****	*****	*****	*****
MAR 7,83	MAR 6,83	*****	0.32	*****	*****	*****	*****	0.0339
MAR 9,83	MAR 8,83	0.11	0.08	0.020	0.020	0.040	0.202	0.1023
MAR 10,83	MAR 9,83	0.06	0.09	0.010	<T	0.025	0.250	0.0240
MAR 11,83	MAR 10,83	*****	*****	*****	*****	*****	*****	0.0871
MAR 20,83	MAR 18,83	0.07	0.14	0.015	0.015	0.085	0.196	0.0107
MAR 22,83	MAR 21,83	*****	*****	*****	*****	*****	*****	*****
MAR 28,83	MAR 27,83	*****	*****	*****	*****	*****	*****	*****
APR 3,83	APR 2,83	0.17	0.07	0.020	0.010	0.030	0.248	0.0129
APR 4,83	APR 3,83	0.40	0.34	0.060	0.055	0.140	0.670	*****
APR 8,83	APR 7,83	0.26	0.21	0.020	0.040	0.030	0.880	0.2042
APR 10,83	APR 9,83	0.06	0.05	0.010	0.030	0.020	0.054	0.0063
APR 11,83	APR 10,83	0.09	0.09	0.010	0.040	0.050	0.366	0.0245
APR 15,83	APR 14,83	0.58	0.52	0.090	0.050	0.290	0.430	0.0013
APR 16,83	APR 15,83	0.33	0.21	0.030	0.030	0.020	0.232	0.0955
APR 20,83	APR 19,83	*****	*****	*****	*****	*****	*****	*****
APR 21,83	APR 20,83	0.09	0.04	0.020	0.020	0.020	0.076	0.0174
APR 25,83	APR 24,83	B 1.33	0.20	B 0.120	0.060	0.070	D 0.880	0.0372
APR 26,83	APR 25,83	0.05	0.01	0.015	0.015	0.005	0.042	0.0050
APR 29,83	APR 28,83	*****	0.94	*****	*****	*****	*****	0.2239
MAY 1,83	APR 30,83	0.17	0.12	0.025	0.045	0.040	0.352	0.0692
MAY 2,83	MAY 1,83	0.14	0.07	0.030	0.045	0.100	0.560	0.0468
MAY 3,83	MAY 2,83	0.36	0.05	0.060	0.040	0.055	0.268	0.0355
MAY 4,83	MAY 3,83	0.33	0.05	0.030	0.045	0.055	0.440	D 0.0501
MAY 5,83	MAY 4,83	0.51	0.10	0.075	0.080	0.075	0.880	0.0380
MAY 9,83	MAY 7,83	0.65	0.16	0.065	0.055	0.050	0.550	0.0575
MAY 15,83	MAY 14,83	0.18	0.12	0.020	0.030	0.030	D 0.350	0.0631
MAY 20,83	MAY 19,83	0.15	0.15	0.025	0.025	0.060	0.340	0.0437

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM										PAGE : 4	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
03-COMP/04-OTHER											
MAY 23,83	MAY 22,83	800 800	1500 2300	1	7.3	1	23999	2	1	99	
MAY 26,83	MAY 25,83	800 800	****	1	5.0	1	91001	2	1	129	N
MAY 30,83	MAY 29,83	800 800	400 745	1	7.0	1	91003	2	1	103	
MAY 31,83	MAY 30,83	800 800	1900 2300	1	2.5	1	91005	2	1	87	
JUN 7,83	JUN 6,83	800 800	1000 1600	1	4.6	1	91007	2	1	68	
JUN 27,83	JUN 26,83	800 800	2300 300	1	18.0	1	91010	2	1	104	
JUL 22,83	JUL 21,83	800 800	1300 1730	1	11.8	1	91012	2	1	98	C
JUL 29,83	JUL 28,83	800 800	1800 2200	1	1.4	1	91014	2	1	3	E
JUL 30,83	JUL 29,83	800 800	100 300	1	9.0	1	91016	2	1	97	
AUG 1,83	JUL 31,83	800 800	900 1100	1	27.6	1	91018	2	1	99	
AUG 7,83	AUG 6,83	800 800	2100 2300	1	9.0	1	91020	2	1	97	H
AUG 12,83	AUG 11,83	800 800	2000 2300	1	2.4	1	91022	2	1	6	E
AUG 18,83	AUG 17,83	800 800	800 430	1	4.7	1	91024	2	1	96	HCM
AUG 23,83	AUG 22,83	800 800	815 1200	1	17.8	1	91026	2	1	92	
AUG 30,83	AUG 29,83	800 800	****	1	0.2	1	91027	2	1	****	E
SEP 10,83	SEP 9,83	800 800	200 400	1	1.1	1	91029	2	1	99	
SEP 17,83	SEP 16,83	800 800	1400 2400	1	15.5	1	91030	2	1	80	
SEP 19,83	SEP 18,83	800 800	****	1	8.4	1	91031	2	1	91	Q
SEP 22,83	SEP 21,83	800 800	1030 1600	1	31.0	1	91033	2	1	99	
SEP 26,83	SEP 25,83	800 800	400 700	1	1.2	1	91037	2	1	1	E
OCT 4,83	OCT 3,83	800 800	100 200	1	0.8	1	91039	2	1	17	N
OCT 5,83	OCT 4,83	800 800	900 1600	1	18.6	1	91041	2	1	98	N
OCT 6,83	OCT 5,83	800 800	1100 2100	1	21.3	1	91043	2	1	98	M
OCT 9,83	OCT 8,83	800 800	900 1600	1	8.0	1	91045	2	1	60	
OCT 13,83	OCT 12,83	800 800	900 2100	1	17.7	1	91047	2	1	93	JHCH
OCT 14,83	OCT 13,83	800 800	2100 100	1	16.4	1	91051	2	1	97	
OCT 15,83	OCT 14,83	800 800	1030 1430	1	3.0	1	91053	2	1	65	
OCT 24,83	OCT 23,83	800 800	830 2100	1	19.8	1	91055	2	1	98	
OCT 26,83	OCT 25,83	800 800	200 400	1	1.9	1	91057	2	1	4	
OCT 27,83	OCT 26,83	800 800	1700 2000	1	1.1	1	91059	2	1	1	E
NOV 3,83	NOV 2,83	800 800	1900 800	1	19.6	1	91061	2	1	88	JHM
NOV 6,83	NOV 5,83	800 800	****	3	12.6	1	91066	2	1	57	Y2
NOV 16,83	NOV 15,83	800 800	1400 800	3	****	1	91068	2	1	****	
NOV 17,83	NOV 16,83	800 800	800 2200	2	****	1	91072	2	1	****	
NOV 21,83	NOV 20,83	800 800	1930 100	1	16.0	1	91074	2	1	100	J
NOV 24,83	NOV 23,83	800 800	1900 2300	1	0.8	2	91076	2	1	9	
NOV 28,83	NOV 27,83	800 800	1900 200	3	11.2	2	91078	2	1	94	J
DEC 5,83	DEC 4,83	800 800	900 2100	2	15.6	2	91080	2	1	52	NCH
DEC 6,83	DEC 5,83	800 800	1000 800	1	11.6	2	91082	2	1	12	FI
DEC 7,83	DEC 6,83	800 800	800 200	3	14.2	2	91084	2	1	70	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM				#10		PAGE : 5		
REMOVAL DATE	EXPOSURE DATE	VOLUME	CONDUCT.	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 23,83	MAY 22,83	467.0	23.2	4.54	4.53	0.1250	2.55	0.30
MAY 26,83	MAY 25,83	415.0	53.0	4.14	4.05	0.1282	4.10	0.99
MAY 30,83	MAY 29,83	463.0	36.8	4.25	4.23	0.0880	4.35	0.45
MAY 31,83	MAY 30,83	141.0	35.3	*****	4.33	0.0790	3.60	0.73
JUN 7,83	JUN 6,83	201.0	50.5	4.11	4.07	0.1216	5.40	0.43
JUN 27,83	JUN 26,83	1210.0	65.5	3.97	3.98	0.1522	7.30	0.89
JUL 22,83	JUL 21,83	743.0	13.9	G 6.33	G 6.78	0.0220	1.80	0.38
JUL 29,83	JUL 28,83	3.0	*****	*****	*****	*****	*****	*****
JUL 30,83	JUL 29,83	563.0	16.3	4.55	4.77	0.0454	1.75	0.26
AUG 1,83	JUL 31,83	1763.0	35.5	4.20	4.33	0.0892	3.70	0.30
AUG 7,83	AUG 6,83	560.0	12.0	4.73	4.89	0.0364	1.10	0.12
AUG 12,83	AUG 11,83	10.0	*****	*****	*****	*****	*****	*****
AUG 18,83	AUG 17,83	290.0	G 235.0	3.35	3.54	G 0.5480	G 23.30	2.40
AUG 23,83	AUG 22,83	1051.0	23.5	4.27	4.42	0.0648	2.40	0.13
AUG 30,83	AUG 29,83	*****	*****	*****	*****	*****	*****	*****
SEP 10,83	SEP 9,83	70.0	*****	*****	*****	*****	*****	*****
SEP 17,83	SEP 16,83	799.0	56.8	3.89	4.06	0.0964	1.10	0.48
SEP 19,83	SEP 17,83	492.0	*****	*****	*****	*****	4.15	0.96
SEP 22,83	SEP 21,83	1971.0	23.3	4.25	4.48	0.0370	2.35	0.20
SEP 26,83	SEP 25,83	1.0	*****	*****	*****	*****	*****	*****
OCT 4,83	OCT 3,83	9.0	*****	*****	*****	*****	*****	*****
OCT 5,83	OCT 4,83	1174.0	39.5	4.03	4.14	0.1050	4.45	0.62
OCT 6,83	OCT 5,83	1345.0	10.7	4.56	4.78	0.0374	1.00	0.10
OCT 9,83	OCT 8,83	310.0	24.6	4.29	4.38	0.0624	2.90	0.39
OCT 13,83	OCT 12,83	1063.0	3.0	5.33	6.90	0.0140	0.10	0.06
OCT 14,83	OCT 13,83	1023.0	7.0	4.72	4.84	0.0312	0.80	0.17
OCT 15,83	OCT 14,83	126.0	12.5	*****	5.00	0.0308	1.65	0.23
OCT 24,83	OCT 23,83	1254.0	9.5	4.70	4.85	0.0318	0.90	0.13
OCT 26,83	OCT 25,83	5.0	*****	*****	*****	*****	*****	*****
OCT 27,83	OCT 26,83	1.0	*****	*****	*****	*****	*****	*****
NOV 3,83	NOV 2,83	1115.0	20.8	4.11	4.69	0.0530	3.10	0.51
NOV 6,83	NOV 4,83	463.0	10.8	4.47	4.73	0.0352	0.80	0.12
NOV 16,83	NOV 15,83	2619.0	7.5	4.72	5.00	0.0242	0.45	0.10
NOV 17,83	NOV 16,83	174.0	11.9	*****	4.66	0.0380	0.60	0.26
NOV 21,83	NOV 20,83	1032.0	20.0	3.82	4.42	0.0540	1.70	0.39
NOV 24,83	NOV 23,83	50.0	*****	*****	4.29	0.0766	*****	*****
NOV 28,83	NOV 27,83	675.0	21.7	3.68	4.40	0.0584	1.80	0.41
DEC 5,83	DEC 4,83	328.0	4.5	*****	5.41	0.0202	0.20	0.10
DEC 6,83	DEC 5,83	93.0	*****	*****	4.04	0.1148	4.45	0.93
DEC 7,83	DEC 6,83	646.0	45.2	*****	4.03	0.1152	3.55	0.76

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM										#10	PAGE : 6	
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L				
MAY 23,83	MAY 22,83	0.20	0.10	0.030	0.040	0.035	0.330	0.0295				
MAY 26,83	MAY 25,83	0.47	0.16	0.080	0.040	0.020	0.460	0.0891				
MAY 30,83	MAY 29,83	0.19	0.15	0.035	0.035	0.060	0.720	0.0589				
MAY 31,83	MAY 30,83	0.79	0.21	0.120	0.075	0.060	0.420	0.0468				
JUN 7,83	JUN 6,83	0.20	0.12	0.035	0.030	0.060	0.520	0.0851				
JUN 27,83	JUN 26,83	0.51	0.18	0.100	0.075	0.045	0.970	0.1047				
JUL 22,83	JUL 21,83	0.87	0.10	0.090	0.125	0.025	0.740	G 0.0002				
JUL 29,83	JUL 28,83	*****	*****	*****	*****	*****	*****	*****				
JUL 30,83	JUL 29,83	0.24	0.04	0.025	0.015	<T 0.005	0.278	0.0170				
AUG 1,83	JUL 31,83	0.11	0.07	0.010	<T 0.010	0.015	0.490	0.0468				
AUG 7,83	AUG 6,83	6.18	0.05	0.020	0.095	0.140	0.148	0.0129				
AUG 12,83	AUG 11,83	*****	*****	*****	*****	*****	*****	*****				
AUG 18,83	AUG 17,83	1.09	0.52	0.145	0.065	0.055	1.330	0.2884				
AUG 23,83	AUG 22,83	0.12	0.04	0.030	0.115	0.105	0.188	0.0380				
AUG 30,83	AUG 29,83	*****	*****	*****	*****	*****	*****	*****				
SEP 10,83	SEP 9,83	1.73	0.48	G 0.205	0.125	0.290	0.296	0.0871				
SEP 17,83	SEP 16,83	0.29	0.43	0.060	0.030	0.270	0.540	0.0331				
SEP 19,83	SEP 17,83	*****	*****	*****	*****	*****	*****	*****				
SEP 22,83	SEP 21,83	0.19	0.08	0.010	0.020	0.075	0.236	0.0100				
SEP 26,83	SEP 25,83	*****	*****	*****	*****	*****	*****	*****				
OCT 4,83	OCT 3,83	*****	*****	*****	*****	*****	*****	*****				
OCT 5,83	OCT 4,83	0.31	0.14	0.045	0.050	<W 0.005	0.610	0.0724				
OCT 6,83	OCT 5,83	0.03	0.02	0.005	<T 0.010	<W 0.005	0.060	0.0166				
OCT 9,83	OCT 8,83	0.35	0.10	0.020	0.040	<W 0.005	0.380	0.0417				
OCT 13,83	OCT 12,83	0.03	0.11	<T 0.005	<T 0.015	<W 0.005	0.052	G 0.0001				
OCT 14,83	OCT 13,83	0.06	0.02	<W 0.005	0.040	<W 0.005	0.106	0.0145				
OCT 15,83	OCT 14,83	0.42	0.17	0.035	0.045	0.090	0.222	0.0100				
OCT 24,83	OCT 23,83	0.13	0.04	D 0.010	<T 0.010	0.035	0.128	0.0141				
OCT 26,83	OCT 25,83	*****	*****	*****	*****	*****	*****	*****				
OCT 27,83	OCT 26,83	*****	*****	*****	*****	*****	*****	*****				
NOV 3,83	NOV 2,83	D 0.63	0.26	0.080	0.055	0.025	0.346	0.0204				
NOV 6,83	NOV 4,83	0.04	0.03	0.005	0.005	<T 0.010	0.050	0.0186				
NOV 16,83	NOV 15,83	0.06	0.05	0.005	0.020	0.020	0.054	0.0100				
NOV 17,83	NOV 16,83	0.06	0.05	0.005	<T 0.005	0.005	0.044	0.0219				
NOV 21,83	NOV 20,83	0.05	0.11	0.010	0.030	0.080	0.248	0.0380				
NOV 24,83	NOV 23,83	*****	*****	*****	*****	*****	*****	0.0513				
NOV 28,83	NOV 27,83	0.11	0.05	0.010	0.025	0.020	0.168	0.0398				
DEC 5,83	DEC 4,83	0.07	0.03	0.005	<T 0.005	0.020	0.020	G 0.0039				
DEC 6,83	DEC 5,83	0.40	0.17	0.035	0.060	0.050	0.044	0.0912				
DEC 7,83	DEC 6,83	0.11	0.11	0.005	<T 0.015	0.020	0.410	0.0933				

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10

PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-HOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
DEC 28,83	DEC 15,83	800 800	800 800	3	36.7	2	91086	2	1	67	
DEC 29,83	DEC 28,83	800 800	900 2300	2	17.5	2	91088	2	1	70	HMV13

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM				#10	PAGE : 8			
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 28,83	DEC 15,83	1595.0	15.6	*****	U 5.80	0.0196	2.70	0.37
DEC 29,83	DEC 28,83	787.0	18.3	*****	4.44	0.0600	1.05	0.51

ONTARIO MINISTRY OF THE ENVIRONMENT
 DAILY SAMPLING ANALYSIS RESULTS
 APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM				#10	PAGE : 9			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 28,83	DEC 15,83	0.97	7.75	G 0.320	0.040	0.530	0.820	U 0.0016
DEC 29,83	DEC 26,83	0.11	0.15	0.010	<T 0.010	0.045	0.206	0.0363

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AERO-CHEM #12												PAGE : 1
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	DEPTH (MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE	
03-COMP/04-OTHER												
JAN 7,83	JAN 6,83	700 700	530 540	2	2.1	2	22726	2	1	5	N	
JAN 8,83	JAN 7,83	700 700	1310 1325	1	3.1	2	22727	2	1	48	N	
JAN 11,83	JAN 10,83	700 700	2310 2335	1	29.1	2	22728	2	1	96		
JAN 12,83	JAN 11,83	700 700	1000 1010	2	3.3	2	22729	2	1	****	EF	
JAN 16,83	JAN 15,83	700 700	800 1100	2	8.1	2	22730	2	1	****	EF	
JAN 24,83	JAN 23,83	700 700	1200 1700	3	8.7	2	22731	2	1	U 49	FL	
JAN 25,83	JAN 24,83	700 700	1900 1910	1	1.7	2	22732	2	1	65		
JAN 26,83	JAN 25,83	700 700	1830 1833	3	1.3	2	22733	2	1	7	N	
JAN 31,83	JAN 30,83	700 700	1700 1730	1	5.9	2	22734	2	1	77		
FEB 1,83	JAN 31,83	700 700	910 920	1	1.9	2	22735	2	1	36	N	
FEB 3,83	FEB 2,83	700 700	1400 1430	1	36.1	2	22736	2	1	76		
FEB 4,83	FEB 3,83	700 700	1000 1015	1	4.9	2	22737	2	1	68		
FEB 8,83	FEB 7,83	700 700	1200 1220	2	13.1	2	22738	2	1	****	EF	
FEB 18,83	FEB 17,83	700 700	730 740	1	0.3	2	22739	2	1	U 218	P	
MAR 9,83	MAR 8,83	700 700	1700 1720	1	5.3	2	22740	2	1	83	HCM	
MAR 10,83	MAR 9,83	700 700	1605 1615	1	1.3	2	22741	2	1	73		
MAR 11,83	MAR 10,83	700 700	****	1	4.7	2	22742	2	1	66		
MAR 12,83	MAR 11,83	700 700	205 720	2	1.7	2	22743	2	1	59		
MAR 15,83	MAR 14,83	700 700	1100 1110	1	0.5	2	22744	2	1	65	E	
MAR 19,83	MAR 18,83	700 700	430 500	1	17.7	2	22745	2	1	114		
MAR 20,83	MAR 19,83	700 700	1510 1520	1	1.7	2	22746	2	1	3	E	
MAR 22,83	MAR 21,83	700 700	1010 1025	3	12.9	2	22747	2	1	****	EF	
MAR 26,83	MAR 25,83	700 700	2000 2030	2	19.1	2	22748	2	1	****	EG	
MAR 29,83	MAR 28,83	700 700	1710 1900	1	2.5	2	22749	2	1	63		
APR 2,83	APR 1,83	700 700	150 310	2	8.7	2	22750	2	1	94		
APR 4,83	APR 3,83	700 700	300 400	1	4.9	2	22751	2	1	92		
APR 8,83	APR 7,83	700 700	900 925	1	5.3	2	22752	2	1	90		
APR 10,83	APR 9,83	700 700	610 700	1	4.1	2	22753	2	1	101	JHC	
APR 11,83	APR 10,83	700 700	1000 1100	1	13.5	2	22754	2	1	78	JHC	
APR 12,83	APR 11,83	700 700	700 735	2	0.9	2	22755	2	1	53		
APR 15,83	APR 14,83	700 700	2345 1	1	9.3	2	22756	2	1	101	J	
APR 16,83	APR 15,83	700 700	1645 1700	1	17.8	2	22757	2	1	101		
APR 17,83	APR 16,83	700 700	1000 1009	1	1.6	2	22758	2	1	145	N	
APR 20,83	APR 19,83	700 700	1830 1900	2	9.0	2	22759	2	1	****	EF	
APR 21,83	APR 20,83	700 700	930 940	2	10.2	2	22760	2	1	57		
APR 22,83	APR 21,83	700 700	1850 1855	2	2.1	2	22761	2	1	73		
APR 25,83	APR 24,83	700 700	1800 1805	1	7.0	2	22762	2	1	100		
APR 26,83	APR 25,83	700 700	1745 1750	1	9.1	2	22763	2	1	87		
APR 29,83	APR 28,83	700 700	2220 2225	1	3.4	2	22764	2	1	131	N	
MAY 1,83	APR 30,83	700 700	2020 2030	1	27.0	2	22765	2	1	100	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM				#12	PAGE : 2			
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 7,83	JAN 6,83	8.0	*****	*****	*****	*****	*****	*****
JAN 8,83	JAN 7,83	97.0	*****	*****	3.82	0.1762	6.05	1.22
JAN 11,83	JAN 10,83	1794.0	6.1	5.06	4.93	0.0330	0.50	0.10
JAN 12,83	JAN 11,83	*****	*****	*****	*****	*****	*****	*****
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****
JAN 24,83	JAN 23,83	276.0	23.0	4.33	4.41	0.0902	2.10	0.45
JAN 25,83	JAN 24,83	71.0	*****	*****	4.64	0.0546	1.65	0.50
JAN 26,83	JAN 25,83	6.0	*****	*****	*****	*****	*****	*****
JAN 31,83	JAN 30,83	292.0	41.0	4.09	4.13	0.1192	3.20	0.85
FEB 1,83	JAN 31,83	45.0	*****	*****	5.06	0.0422	5.95	1.10
FEB 3,83	FEB 2,83	1774.0	13.1	4.57	4.52	0.0512	1.05	0.23
FEB 4,83	FEB 3,83	214.0	*****	4.24	4.31	0.0748	2.25	0.42
FEB 8,83	FEB 7,83	*****	*****	*****	*****	*****	*****	*****
FEB 18,83	FEB 17,83	42.0	*****	*****	3.31	0.4700	4.85	5.80
MAR 9,83	MAR 8,83	285.0	9.2	5.77	6.02	0.0212	1.30	0.18
MAR 10,83	MAR 9,83	61.0	*****	*****	5.87	0.0306	4.10	0.49
MAR 11,83	MAR 10,83	201.0	12.3	4.73	4.77	0.0350	1.00	0.17
MAR 12,83	MAR 11,83	65.0	*****	*****	4.79	0.0324	0.50	0.11
MAR 15,83	MAR 14,83	21.0	*****	*****	*****	*****	*****	*****
MAR 19,83	MAR 18,83	1300.0	4.8	4.88	5.28	0.0248	0.30	0.09
MAR 20,83	MAR 19,83	4.0	*****	*****	*****	*****	*****	*****
MAR 22,83	MAR 21,83	*****	*****	*****	*****	*****	*****	*****
MAR 28,83	MAR 27,83	*****	*****	*****	*****	*****	*****	*****
MAR 29,83	MAR 28,83	101.0	19.7	*****	4.57	0.0496	1.35	0.43
APR 2,83	APR 1,83	529.0	7.9	4.79	5.07	0.0264	0.65	0.16
APR 4,83	APR 3,83	290.0	35.2	4.04	4.26	0.0838	2.75	0.66
APR 8,83	APR 7,83	306.0	81.5	3.76	3.77	0.2060	7.40	1.27
APR 10,83	APR 9,83	268.0	14.2	5.00	5.89	0.0178	1.00	0.13
APR 11,83	APR 10,83	675.0	4.9	5.18	5.84	0.0162	0.55	0.09
APR 12,83	APR 11,83	31.0	*****	*****	*****	*****	*****	*****
APR 15,83	APR 14,83	607.0	30.5	5.15	4.26	0.0764	5.35	0.62
APR 16,83	APR 15,83	1157.0	23.7	4.26	4.36	0.0652	2.55	0.48
APR 17,83	APR 16,83	149.0	*****	*****	4.20	0.1874	1.85	1.14
APR 20,83	APR 19,83	*****	*****	*****	*****	*****	*****	*****
APR 21,83	APR 20,83	376.0	6.6	4.72	4.93	0.0344	0.90	0.03
APR 22,83	APR 21,83	99.0	*****	*****	4.93	0.0354	0.60	0.13
APR 25,83	APR 24,83	452.0	17.9	4.56	4.51	0.0564	2.00	0.16
APR 26,83	APR 25,83	512.0	5.4	5.01	5.07	0.0284	0.50	0.04
APR 29,83	APR 28,83	286.0	95.0	4.05	3.97	0.1666	12.00	1.75
MAY 1,83	APR 30,83	1744.0	28.0	4.41	4.56	0.0558	2.95	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12										PAGE : 3	
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L			
JAN 7,83	JAN 6,83	*****	*****	*****	*****	*****	*****	*****			
JAN 8,83	JAN 7,83	0.28	0.36	0.070	0.080	0.165	0.092	0.1514			
JAN 11,83	JAN 10,83	0.03	0.09	0.010	<T 0.010	0.045	0.074	0.0117			
JAN 12,83	JAN 11,83	*****	*****	*****	*****	*****	*****	*****			
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****			
JAN 24,83	JAN 23,83	0.08	0.19	0.015	0.045	0.075	0.450	0.0389			
JAN 25,83	JAN 24,83	0.17	0.51	0.035	U 0.225	0.325	*****	0.0229			
JAN 26,83	JAN 25,83	*****	*****	*****	*****	*****	*****	*****			
JAN 31,83	JAN 30,83	0.17	0.26	0.025	0.115	0.135	0.510	0.0741			
FEB 1,83	JAN 31,83	*****	0.32	*****	*****	*****	*****	0.0087			
FEB 3,83	FEB 2,83	0.04	0.13	0.020	0.035	0.040	0.162	0.0302			
FEB 4,83	FEB 3,83	0.09	0.30	0.020	0.130	0.140	0.328	0.0490			
FEB 8,83	FEB 7,83	*****	*****	*****	*****	*****	*****	*****			
FEB 18,83	FEB 17,83	*****	G 1.32	*****	*****	*****	*****	0.4898			
MAR 9,83	MAR 8,83	0.10	0.23	0.025	0.060	0.150	0.064	0.0010			
MAR 10,83	MAR 9,83	*****	D 0.38	*****	*****	*****	*****	U 0.0013			
MAR 11,83	MAR 10,83	0.07	0.57	0.025	G 0.180	0.400	0.216	0.0170			
MAR 12,83	MAR 11,83	0.09	0.53	0.030	G 0.190	0.435	*****	0.0162			
MAR 15,83	MAR 14,83	*****	*****	*****	*****	*****	*****	*****			
MAR 19,83	MAR 18,83	0.04	0.12	<T 0.005	0.020	0.070	0.102	0.0052			
MAR 20,83	MAR 19,83	*****	*****	*****	*****	*****	*****	*****			
MAR 22,83	MAR 21,83	*****	*****	*****	*****	*****	*****	*****			
MAR 28,83	MAR 27,83	*****	*****	*****	*****	*****	*****	*****			
MAR 29,83	MAR 28,83	0.16	0.26	0.025	G 0.140	0.170	*****	0.0269			
APR 2,83	APR 1,83	0.12	0.06	0.020	0.020	0.030	0.144	0.0085			
APR 4,83	APR 3,83	0.23	0.32	0.040	0.095	0.180	0.400	0.0550			
APR 8,83	APR 7,83	0.19	0.17	0.030	0.060	0.110	0.760	0.1698			
APR 10,83	APR 9,83	0.12	0.08	0.020	0.050	0.050	D 0.292	G 0.0013			
APR 11,83	APR 10,83	0.12	0.06	0.010	0.030	0.040	0.132	G 0.0014			
APR 12,83	APR 11,83	*****	0.14	*****	*****	*****	*****	*****			
APR 15,83	APR 14,83	0.24	0.28	0.030	0.030	0.120	0.132	0.0550			
APR 16,83	APR 15,83	0.06	0.09	0.005	0.030	0.020	0.0437	0.0437			
APR 17,83	APR 16,83	0.23	0.48	0.030	G 0.160	0.240	0.350	0.0631			
APR 20,83	APR 19,83	*****	*****	*****	*****	*****	*****	*****			
APR 21,83	APR 20,83	0.06	<T 0.01	0.025	0.020	0.025	0.024	0.0117			
APR 22,83	APR 21,83	0.11	0.04	0.035	0.055	0.040	<T 0.004	0.0117			
APR 25,83	APR 24,83	0.05	0.03	0.020	0.020	0.005	0.176	0.0309			
APR 26,83	APR 25,83	0.03	0.03	0.020	0.020	0.010	0.036	0.0085			
APR 29,83	APR 28,83	G 1.71	0.40	G 0.300	0.125	0.150	G 2.180	0.1072			
MAY 1,83	APR 30,83	0.14	0.10	0.025	0.070	0.065	0.550	0.0275			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEN #12										PAGE : 4	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		FIELD OFFICE
MAY 2,83	MAY 1,83	700 700	410 415	1	3.2	2	22766	2	1	42	N
MAY 3,83	MAY 2,83	700 700	1910 1920	1	18.8	2	22767	2	1	112	
MAY 4,83	MAY 3,83	700 700	2135 2145	1	4.4	2	22768	2	1	104	
MAY 5,83	MAY 4,83	700 700	1910 1915	1	****	*	22769	2	1	****	
MAY 8,83	MAY 7,83	700 700	515 520	1	11.0	2	22770	2	1	101	
MAY 9,83	MAY 8,83	700 700	1510 1535	1	4.6	2	22771	2	1	112	
MAY 10,83	MAY 9,83	700 700	610 640	1	1.6	2	22772	2	1	66	
MAY 11,83	MAY 10,83	700 700	920 930	1	3.6	2	22773	2	1	112	
MAY 15,83	MAY 14,83	700 700	300 340	1	3.8	2	22774	2	1	115	
MAY 20,83	MAY 19,83	700 700	335 400	1	11.4	1	22775	2	1	96	
MAY 23,83	MAY 22,83	700 700	2105 2110	1	5.0	1	22776	2	1	95	
MAY 26,83	MAY 25,83	700 700	50 100	1	10.0	1	22777	2	1	****	EF
MAY 30,83	MAY 29,83	700 700	2310 2315	1	11.2	1	22778	2	1	92	J
MAY 31,83	MAY 30,83	700 700	1000 1005	1	3.0	1	22779	2	1	74	HM
JUN 7,83	JUN 6,83	700 700	600 645	1	1.2	1	22780	2	1	57	
JUN 25,83	JUN 24,83	700 700	1250 1255	1	5.0	1	22781	2	1	91	
JUN 27,83	JUN 26,83	700 700	2110 2115	1	5.8	1	22783	2	1	90	CD
JUL 1,83	JUN 30,83	700 700	5 15	1	18.6	1	22784	2	1	98	HM
JUL 4,83	JUL 3,83	700 700	1005 1020	1	10.0	1	22785	2	1	70	EG
JUL 5,83	JUL 4,83	700 700	800 810	1	1.1	1	22786	2	1	60	
JUL 22,83	JUL 21,83	700 700	2140 2155	1	0.6	1	22787	2	1	51	
JUL 30,83	JUL 29,83	700 700	200 220	1	8.0	1	22788	2	1	100	H
AUG 1,83	JUL 31,83	700 700	645 700	1	14.0	1	22789	2	1	108	
AUG 6,83	AUG 5,83	700 700	2150 2200	1	25.2	1	22790	2	1	111	M
AUG 9,83	AUG 8,83	700 700	1700 1720	1	2.1	1	22792	2	1	93	
AUG 12,83	AUG 11,83	700 700	1610 1625	1	23.2	1	22793	2	1	112	H
AUG 22,83	AUG 18,83	700 700	1715 1725	1	3.2	1	22794	2	1	72	N
AUG 29,83	AUG 21,83	700 700	710 718	1	0.8	1	22795	2	1	38	N
AUG 31,83	AUG 28,83	700 700	1700 1710	1	12.0	1	22796	2	1	79	J
SEP 10,83	SEP 9,83	700 700	1705 1735	1	8.0	1	22797	2	1	104	
SEP 17,83	SEP 16,83	700 700	1705 1710	1	24.2	1	22798	2	1	104	J
SEP 18,83	SEP 17,83	700 700	2200 2215	1	1.0	1	22799	2	1	274	N
SEP 19,83	SEP 18,83	700 700	1500 1520	1	3.8	1	22801	2	1	90	P
SEP 22,83	SEP 21,83	700 700	1700 1710	1	10.0	1	22802	2	1	107	
SEP 24,83	SEP 23,83	700 700	1100 1120	1	0.6	1	22803	2	1	137	N
SEP 26,83	SEP 25,83	700 700	1500 1515	1	28.1	1	22804	2	1	106	C
OCT 4,83	OCT 3,83	700 700	415 420	1	2.8	1	22805	2	1	70	M
OCT 5,83	OCT 4,83	700 700	110 115	1	1.4	1	22806	2	1	29	N
OCT 5,83	OCT 4,83	700 700	2230 2305	1	18.0	1	22807	2	1	66	
		700 700					22808	2	1	10F	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

#12

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM

PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 2.83	MAY 1.83	88.0	*****	*****	4.39	0.0684	3.15	0.31
MAY 3.83	MAY 2.83	1358.0	*****	4.68	4.57	0.0532	*****	*****
MAY 4.83	MAY 3.83	296.0	*****	4.19	4.12	0.1206	*****	*****
MAY 5.83	MAY 4.83	31.0	*****	*****	4.47	0.0788	*****	*****
MAY 6.83	MAY 7.83	714.0	31.4	4.36	4.38	0.2060	3.30	0.48
MAY 7.83	MAY 8.83	331.0	14.4	4.64		0.0504	1.50	0.12
MAY 8.83	MAY 9.83	68.0	*****	*****	6.21	0.0160	0.50	0.10
MAY 9.83	MAY 10.83	260.0	5.6	5.04	5.23	0.0276	0.50	0.10
MAY 10.83	MAY 11.83	282.0	27.7	4.44	4.37	0.0702	2.50	0.33
MAY 11.83	MAY 12.83	705.0	27.4	4.43	4.35	0.0718	2.25	0.31
MAY 12.83	MAY 13.83	305.0	24.6	4.58	4.62	0.0526	2.85	0.47
MAY 13.83	MAY 14.83	*****	*****	*****	*****	*****	*****	*****
MAY 14.83	MAY 15.83	663.0	D 130.0	6.33	5.67	0.1152	6.25	0.95
MAY 15.83	MAY 16.83	143.0	*****	*****	4.12	0.1206	3.75	0.59
MAY 16.83	MAY 17.83	44.0	*****	*****	4.33	0.0892	> 10.00	*****
MAY 17.83	MAY 18.83	294.0	154.0	5.35	5.51	0.1592	5.45	0.61
MAY 18.83	MAY 19.83	335.0	25.5	6.49	7.44	0.0174	3.65	0.55
MAY 19.83	MAY 20.83	1175.0	61.5	3.95	4.05	0.1382	7.35	0.80
MAY 20.83	MAY 21.83	452.0	*****	*****	*****	*****	*****	*****
MAY 21.83	MAY 22.83	43.0	*****	*****	7.22	0.0336	11.20	1.07
MAY 22.83	MAY 23.83	20.0	*****	*****	7.40	0.0184	*****	*****
MAY 23.83	MAY 24.83	515.0	25.0	5.12	5.32	0.0340	4.35	0.75
MAY 24.83	MAY 25.83	974.0	30.4	4.36	4.46	0.0728	3.45	0.17
MAY 25.83	MAY 26.83	1804.0	41.3	4.16	4.23	0.1032	3.95	0.46
MAY 26.83	MAY 27.83	126.0	14.4	*****	6.26	0.0214	1.95	0.46
MAY 27.83	MAY 28.83	1666.0	16.3	4.85	5.04	0.0354	2.45	0.32
MAY 28.83	MAY 29.83	148.0	15.8	*****	4.89	0.0412	2.20	0.20
MAY 29.83	MAY 30.83	20.0	*****	*****	4.53	*****	*****	*****
MAY 30.83	MAY 31.83	612.0	21.2	6.06	7.26	0.0178	3.55	0.50
MAY 31.83	MAY 32.83	536.0	22.5	4.26	4.46	0.0658	2.60	0.18
MAY 32.83	MAY 33.83	1620.0	5.7	5.27	6.69	0.0186	0.65	0.11
MAY 33.83	MAY 34.83	176.0	61.5	*****	4.12	0.1216	7.00	1.22
MAY 34.83	MAY 35.83	221.0	50.5	3.71	*****	*****	*****	*****
MAY 35.83	MAY 36.83	691.0	38.4	3.93	4.26	0.0608	3.40	0.52
MAY 36.83	MAY 37.83	53.0	*****	*****	*****	*****	7.40	1.37
MAY 37.83	MAY 38.83	1920.0	12.7	4.09	4.45	0.0578	1.95	0.21
MAY 38.83	MAY 39.83	126.0	8.3	*****	6.87	0.0194	1.00	0.36
MAY 39.83	MAY 40.83	34.0	*****	*****	4.02	0.1404	4.95	1.06
MAY 40.83	MAY 41.83	60.0	*****	*****	4.34	0.0688	3.75	0.55
MAY 41.83	MAY 42.83	1220.0	40.0	3.96	4.15	0.1042	5.30	0.70

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 2,83	MAY 1,83	0.26	0.10	0.050	0.055	0.070	*****	0.0407
MAY 3,83	MAY 2,83	*****	*****	*****	*****	*****	*****	0.0269
MAY 4,83	MAY 3,83	*****	*****	*****	*****	*****	*****	0.0759
MAY 5,83	MAY 4,83	*****	*****	*****	*****	*****	*****	0.0339
MAY 8,83	MAY 7,83	0.28	0.22	0.060	0.095	0.165	0.590	0.0417
MAY 9,83	MAY 8,83	0.18	0.21	0.035	0.095	0.155	0.110	0.0195
MAY 10,83	MAY 9,83	0.29	0.18	0.055	0.110	0.170	*****	G 0.0006
MAY 11,83	MAY 10,83	0.16	0.07	0.030	0.035	0.065	0.062	G 0.0059
MAY 15,83	MAY 14,83	0.25	0.14	0.035	0.055	0.065	0.216	0.0427
MAY 20,83	MAY 19,83	0.11	0.12	0.025	0.030	0.065	0.186	0.0447
MAY 23,83	MAY 22,83	0.53	0.28	0.095	0.175	0.240	0.352	0.0240
MAY 26,83	MAY 25,83	*****	*****	*****	*****	*****	*****	*****
MAY 30,83	MAY 29,83	*****	0.30	*****	*****	*****	U 13.200	U 0.0021
MAY 31,83	MAY 30,83	0.75	0.42	0.120	0.155	0.120	0.870	0.0759
JUN 7,83	JUN 5,83	*****	1.39	*****	*****	*****	*****	0.0668
JUN 7,83	JUN 6,83	*****	0.18	*****	*****	*****	U 9.210	U 0.0031
JUN 25,83	JUN 24,83	U 2.41	0.16	U 0.540	U 0.275	0.065	0.440	U 0.0000
JUN 27,83	JUN 26,83	0.57	0.18	0.120	0.045	0.050	D 0.102	0.0891
JUL 1,83	JUN 30,83	*****	*****	*****	*****	*****	*****	*****
JUL 4,83	JUL 3,83	*****	2.45	*****	*****	*****	*****	U 0.0001
JUL 5,83	JUL 4,83	*****	*****	*****	*****	*****	*****	U 0.0000
JUL 22,83	JUL 21,83	1.12	0.24	G 0.260	0.100	0.050	0.970	G 0.0048
JUL 30,83	JUL 29,83	0.28	0.26	0.040	0.095	0.160	0.560	0.0347
AUG 1,83	JUL 31,83	0.16	0.18	D 0.020	0.045	0.065	0.324	0.0589
AUG 6,83	AUG 5,83	0.91	0.51	0.135	G 0.270	0.265	0.294	G 0.0005
AUG 9,83	AUG 8,83	0.55	0.19	0.090	0.085	0.055	0.410	0.0091
AUG 12,83	AUG 11,83	0.30	0.26	0.045	0.085	0.150	0.222	0.0129
AUG 19,83	AUG 18,83	*****	*****	*****	*****	*****	*****	0.0295
AUG 22,83	AUG 21,83	U 1.95	0.14	U 0.480	0.055	0.020	0.440	U 0.0001
AUG 29,83	AUG 28,83	0.16	0.04	0.035	0.015	0.015	0.244	0.0347
AUG 31,83	AUG 30,83	0.31	0.04	0.090	0.030	0.015	0.236	U 0.0002
SEP 10,83	SEP 9,83	1.30	0.43	G 0.290	0.175	0.270	0.750	0.0759
SEP 17,83	SEP 16,83	0.23	0.50	0.085	D 0.070	0.305	0.360	*****
SEP 18,83	SEP 17,83	0.13	0.10	0.020	0.030	0.035	0.490	0.0550
SEP 19,83	SEP 18,83	*****	0.42	*****	*****	*****	*****	*****
SEP 22,83	SEP 21,83	0.09	0.04	0.010	<T 0.010	0.005	0.170	0.0355
SEP 24,83	SEP 23,83	0.74	0.19	0.040	0.050	<W 0.005	0.400	U 0.0001
SEP 26,83	SEP 25,83	*****	0.35	*****	*****	*****	*****	0.0955
OCT 4,83	OCT 3,83	*****	0.14	*****	*****	*****	0.370	0.0457
OCT 5,83	OCT 4,83	0.39	0.15	0.050	0.050	<W 0.005	0.830	0.0708

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12										PAGE : 7	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-HOE		
				02-SNOW		02-NIPIER		03-SPECIAL	03-AES	(%)	
				03-COMP/04-OTHER							
OCT 6,83	OCT 5,83	700 700	2000 2030	1	28.4	1	22809	2	1	101	
OCT 9,83	OCT 8,83	700 700	1715 1735	1	10.1	1	22810	2	1	94	
OCT 12,83	OCT 11,83	700 700	****	1	2.0	1	22811	2	1	100	J
OCT 13,83	OCT 12,83	700 700	1700 1715	1	10.0	1	22812	2	1	100	
OCT 14,83	OCT 13,83	700 700	2215 2230	1	10.8	1	22813	2	1	105	
OCT 15,83	OCT 14,83	700 700	1015 1020	1	4.8	1	22814	2	1	97	
OCT 24,83	OCT 23,83	700 700	1725 1810	1	17.2	1	22815	2	1	97	
OCT 26,83	OCT 25,83	700 700	610 700	1	1.0	1	22816	2	1	106	
OCT 27,83	OCT 26,83	700 700	920 935	1	6.0	1	22817	2	1	59	JH
OCT 28,83	OCT 27,83	700 700	740 1110	1	1.2	1	22818	2	1	45	N
NOV 3,83	NOV 2,83	700 700	200 215	3	10.6	1	22819	2	1	102	J
NOV 4,83	NOV 3,83	700 700	745 805	3	4.4	1	22820	2	1	145	NJ
NOV 5,83	NOV 4,83	700 700	915 930	2	13.0	1	22821	2	1	51	J
NOV 6,83	NOV 5,83	700 700	900 925	3	2.6	1	22822	2	1	76	
NOV 11,83	NOV 10,83	700 700	2045 2350	1	12.4	1	22823	2	1	93	
NOV 12,83	NOV 11,83	700 700	1200 1215	3	14.0	1	22824	2	1	73	JHC
NOV 16,83	NOV 15,83	700 700	1215 1400	3	28.1	1	22825	2	1	86	N
NOV 17,83	NOV 16,83	700 700	1020 1050	3	8.6	1	22826	2	1	44	
NOV 21,83	NOV 20,83	700 700	2340 2355	1	18.6	1	22827	2	1	100	
NOV 25,83	NOV 24,83	700 700	715 730	2	1.2	2	22829	2	1	146	
NOV 26,83	NOV 25,83	700 700	1600 1610	3	0.4	2	22830	2	1	****	E
NOV 29,83	NOV 28,83	700 700	2215 2230	3	14.6	2	22831	2	1	82	J
DEC 1,83	NOV 30,83	700 700	1430 1610	2	1.2	2	22833	2	1	****	EK
DEC 5,83	DEC 4,83	700 700	1050 2000	2	12.8	2	22834	2	1	****	EF
DEC 6,83	DEC 5,83	700 700	1000 1900	1	2.4	2	22835	2	1	35	N
DEC 7,83	DEC 6,83	700 700	700 1400	3	26.8	2	22836	2	1	92	
DEC 8,83	DEC 7,83	700 700	820 1400	2	1.0	2	22837	2	1	****	E
DEC 9,83	DEC 8,83	700 700	****	2	1.2	2	22838	2	1	****	E
DEC 11,83	DEC 10,83	700 700	1500 1900	2	4.8	2	22840	2	1	19	N
DEC 12,83	DEC 11,83	700 700	1900 2200	2	5.8	2	22841	2	1	****	EFK
DEC 13,83	DEC 12,83	700 700	1100 1210	4	26.0	2	22842	2	1	14	FI
DEC 14,83	DEC 13,83	700 700	700 700	1	19.0	2	22843	2	1	34	
DEC 15,83	DEC 14,83	700 700	700 1145	1	1.4	2	22844	2	1	81	NHCH
DEC 16,83	DEC 15,83	700 700	130 245	2	2.2	2	22845	2	1	76	
DEC 19,83	DEC 18,83	700 700	910 1110	2	0.8	2	22846	2	1	****	EF
DEC 22,83	DEC 21,83	700 700	930 1200	3	8.8	2	22847	2	1	****	EF
DEC 23,83	DEC 22,83	700 700	1200 1400	3	17.6	2	22848	2	1	****	EF
DEC 24,83	DEC 23,83	700 700	1100 1125	2	0.6	2	22849	2	1	****	EF
DEC 27,83	DEC 26,83	700 700	2200 30	2	2.4	2	22850	2	1	****	EF
DEC 28,83	DEC 27,83	700 700	800 1900	2	1.4	2	22851	2	1	****	EF

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
OCT 6,83	OCT 5,83	1848.0	17.3	4.34	4.49	0.0538	2.05	0.23	
OCT 9,83	OCT 8,83	611.0	20.6	4.31	4.52	0.0532	3.10	0.32	
OCT 12,83	OCT 11,83	129.0	15.0	*****	U	0.0194	1.25	0.19	
OCT 13,83	OCT 12,83	643.0	4.0	*****	G	0.0156	0.25	0.09	
OCT 14,83	OCT 13,83	728.0	8.0	4.71	4.94	0.0294	0.65	0.14	
OCT 15,83	OCT 14,83	299.0	28.8	4.30	4.38	0.0680	2.80	0.67	
OCT 24,83	OCT 23,83	1070.0	8.2	4.80	5.09	0.0264	0.75	0.18	
OCT 26,83	OCT 25,83	68.0	*****	*****	*****	*****	*****	*****	
OCT 27,83	OCT 26,83	230.0	10.2	4.23	5.34	0.0264	1.40	0.24	
OCT 28,83	OCT 27,83	35.0	*****	4.23	5.22	0.0326	3.20	0.84	
NOV 3,83	NOV 2,83	696.0	40.4	3.59	4.22	0.0986	3.55	0.82	
NOV 4,83	NOV 3,83	409.0	25.8	3.86	4.42	0.0666	2.40	0.35	
NOV 5,83	NOV 4,83	430.0	9.2	4.22	4.86	0.0336	0.55	0.13	
NOV 6,83	NOV 5,83	128.0	10.4	*****	4.90	0.0348	1.00	0.10	
NOV 11,83	NOV 10,83	741.0	10.6	4.32	*****	0.0294	0.90	0.11	
NOV 12,83	NOV 11,83	662.0	12.3	4.27	4.65	0.0412	1.25	0.03	
NOV 16,83	NOV 15,83	1554.0	6.0	4.76	5.34	0.0200	0.45	0.04	
NOV 17,83	NOV 16,83	244.0	11.0	4.33	4.73	0.0382	1.00	0.25	
NOV 21,83	NOV 20,83	1204.0	14.0	4.30	4.70	0.0388	1.20	0.25	
NOV 25,83	NOV 24,83	113.0	45.3	*****	4.11	0.1084	4.40	1.13	
NOV 26,83	NOV 25,83	*****	*****	*****	*****	*****	*****	*****	
NOV 29,83	NOV 28,83	772.0	14.8	3.66	4.67	0.0400	1.35	0.35	
DEC 1,83	NOV 30,83	*****	*****	*****	*****	*****	*****	*****	
DEC 5,83	DEC 4,83	*****	*****	*****	*****	*****	*****	*****	
DEC 6,83	DEC 5,83	54.0	*****	*****	*****	*****	*****	*****	
DEC 7,83	DEC 6,83	1596.0	42.2	*****	3.88	0.1614	5.95	1.57	
DEC 8,83	DEC 7,83	*****	*****	*****	4.09	0.1046	3.20	0.79	
DEC 9,83	DEC 8,83	*****	*****	*****	*****	*****	*****	*****	
DEC 11,83	DEC 10,83	61.0	*****	*****	*****	*****	*****	*****	
DEC 12,83	DEC 11,83	247.0	7.5	*****	3.87	0.1600	3.55	1.55	
DEC 13,83	DEC 12,83	421.0	7.5	*****	4.97	0.0256	0.30	0.16	
DEC 14,83	DEC 13,83	73.0	43.1	*****	5.01	0.0254	0.65	0.07	
DEC 15,83	DEC 14,83	108.0	*****	*****	3.95	0.1328	3.15	1.17	
DEC 16,83	DEC 15,83	*****	*****	*****	4.03	0.1142	1.60	1.26	
DEC 19,83	DEC 18,83	*****	*****	*****	*****	*****	*****	*****	
DEC 22,83	DEC 21,83	*****	*****	*****	*****	*****	*****	*****	
DEC 23,83	DEC 22,83	*****	*****	*****	*****	*****	*****	*****	
DEC 24,83	DEC 23,83	*****	*****	*****	*****	*****	*****	*****	
DEC 27,83	DEC 26,83	*****	*****	*****	*****	*****	*****	*****	
DEC 28,83	DEC 27,83	*****	*****	*****	*****	*****	*****	*****	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM				#12	PAGE : 9			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 6,83	OCT 5,83	0.05	0.04	0.005	0.015	<W 0.005	0.354	0.0324
OCT 9,83	OCT 8,83	0.44	0.12	0.070	0.065	<W 0.005	0.362	0.0302
OCT 12,83	OCT 11,83	0.45	U 1.34	0.150	U 0.230	U 0.770	0.690	U 0.0001
OCT 13,83	OCT 12,83	0.06	0.21	0.020	0.020	0.110	0.208	G 0.0004
OCT 14,83	OCT 13,83	0.06	0.02	0.010	<T 0.005	<T 0.010	0.112	0.0115
OCT 15,83	OCT 14,83	0.33	0.13	0.040	0.055	<T 0.010	0.580	0.041
OCT 24,83	OCT 23,83	0.05	0.04	0.005	<T 0.015	0.020	0.260	0.0081
OCT 26,83	OCT 25,83	0.26	0.06	0.050	0.205	G 0.425	0.045	0.0046
OCT 27,83	OCT 26,83	0.21	0.06	0.080	0.045	0.045	0.220	0.0060
OCT 28,83	OCT 27,83	0.24	0.50	0.045	0.050	0.080	0.580	G 0.0060
NOV 3,83	NOV 2,83	0.05	0.10	0.010	0.020	0.035	0.314	0.0380
NOV 4,83	NOV 3,83	0.04	<W 0.01	0.005	<W 0.005	0.020	0.072	0.0138
NOV 5,83	NOV 4,83	0.11	<W 0.02	0.010	<T 0.005	0.030	0.116	0.0126
NOV 6,83	NOV 5,83	0.05	0.05	0.005	0.020	0.020	0.120	0.0224
NOV 11,83	NOV 10,83	0.02	0.03	<T 0.005	<T 0.010	<T 0.005	0.144	G 0.0046
NOV 12,83	NOV 11,83	0.04	0.04	0.005	<T 0.005	0.025	0.244	0.0186
NOV 16,83	NOV 15,83	0.04	0.05	<T 0.005	<T 0.010	0.020	0.280	0.0200
NOV 17,83	NOV 16,83	0.05	0.08	0.010	0.020	0.390	0.600	0.0776
NOV 21,83	NOV 20,83	G 1.34	0.62	0.080	G 0.180	0.020	0.316	0.0214
NOV 25,83	NOV 24,83	0.05	0.05	0.005	0.020	0.020	0.450	0.0813
NOV 26,83	NOV 25,83	0.05	0.05	0.005	0.020	0.020	0.020	0.0098
NOV 29,83	NOV 28,83	0.05	0.05	0.005	0.020	0.020	0.020	0.1122
DEC 1,83	NOV 30,83	0.07	0.34	0.005	<T 0.010	0.015	0.045	0.0933
DEC 5,83	DEC 4,83	0.07	0.07	0.005	0.005	0.005	0.005	0.005
DEC 6,83	DEC 5,83	0.07	0.07	0.005	0.005	0.005	0.005	0.005
DEC 7,83	DEC 6,83	0.07	0.07	0.005	0.005	0.005	0.005	0.005
DEC 8,83	DEC 7,83	0.07	0.07	0.005	0.005	0.005	0.005	0.005
DEC 9,83	DEC 8,83	0.07	0.07	0.005	0.005	0.005	0.005	0.005
DEC 11,83	DEC 10,83	0.03	0.33	0.005	0.005	0.005	0.005	0.005
DEC 12,83	DEC 11,83	0.03	0.02	<T 0.005	<W 0.005	0.020	0.020	0.0107
DEC 13,83	DEC 12,83	0.03	0.03	<W 0.005	<T 0.005	0.020	0.032	0.0098
DEC 14,83	DEC 13,83	0.01	0.27	0.015	0.025	0.045	0.0933	0.0933
DEC 15,83	DEC 14,83	0.09	0.21	0.005	0.005	0.005	0.005	0.005
DEC 16,83	DEC 15,83	0.09	0.21	0.005	0.005	0.005	0.005	0.005
DEC 19,83	DEC 18,83	0.09	0.21	0.005	0.005	0.005	0.005	0.005
DEC 22,83	DEC 21,83	0.09	0.21	0.005	0.005	0.005	0.005	0.005
DEC 23,83	DEC 22,83	0.09	0.21	0.005	0.005	0.005	0.005	0.005
DEC 24,83	DEC 23,83	0.09	0.21	0.005	0.005	0.005	0.005	0.005
DEC 27,83	DEC 26,83	0.09	0.21	0.005	0.005	0.005	0.005	0.005
DEC 28,83	DEC 27,83	0.09	0.21	0.005	0.005	0.005	0.005	0.005

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
DEC 29,83	DEC 28,83	700 700	900 2200	01-RAIN 02-SNOW 03-COMP/04-OTHER	14.0	2	22852	02-APIOS 03-SPECIAL	01-MOE 03-AES	1	U 15 F

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
DEC 29,83	DEC 28,83	140.0	15.6	*****	4.67	0.0386	0.55	0.50	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM		#12	PAGE : 12					
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE N* LAB MG/L
DEC 29,83	DEC 28,83	<T 0.02	0.03	0.010	0.020	0.045	0.234	0.0214

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITHAM CREEK/DAILY/AEROCHEM #09

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
JAN 8,83	JAN 7,83	800 800	1130 200	3	9.1	2	22177	2	1	****	EF
JAN 11,83	JAN 10,83	800 800	930 500	3	22.1	2	22178	2	1	****	EF
JAN 16,83	JAN 15,83	800 800	930 2200	2	2.9	2	22179	2	1	****	EF
JAN 24,83	JAN 23,83	800 800	930 730	3	7.9	2	22180	2	1	****	EF
FEB 1,83	JAN 31,83	800 800	830 1900	1	5.5	2	22181	2	1	****	EF
FEB 3,83	FEB 2,83	800 800	800 2130	1	40.5	2	22182	2	1	****	EF
FEB 8,83	FEB 7,83	800 800	800 1900	2	9.1	2	22183	2	1	****	EF
FEB 23,83	FEB 22,83	800 800	1900 500	3	15.1	2	22184	2	1	85	
MAR 4,83	MAR 3,83	800 800	300 600	2	2.5	2	22185	2	1	U 80	J
MAR 5,83	MAR 4,83	800 800	1300 2200	3	1.3	2	22186	2	1	74	
MAR 7,83	MAR 6,83	800 800	2100 300	1	1.5	2	22187	2	1	****	EF
MAR 10,83	MAR 9,83	800 800	200 1630	1	7.5	2	22188	2	1	85	
MAR 20,83	MAR 19,83	800 800	930 100	1	17.3	2	22189	2	1	102	
MAR 22,83	MAR 21,83	800 800	930 2200	3	15.1	2	22190	2	1	****	EF
MAR 28,83	MAR 27,83	800 800	1300 2330	3	16.9	2	22191	2	1	****	EF
MAR 29,83	MAR 28,83	800 800	1400 2000	2	0.9	2	22192	2	1	156	
APR 4,83	APR 3,83	800 800	830 1900	1	11.7	2	22194	2	1	59	
APR 5,83	APR 4,83	800 800	1000 2200	1	2.1	2	22195	2	1	86	
APR 6,83	APR 5,83	800 800	830 1600	1	3.9	2	22196	2	1	69	
APR 10,83	APR 9,83	800 800	2330 800	1	13.5	2	22197	2	1	57	
APR 11,83	APR 10,83	800 800	800 2100	1	9.9	2	22198	2	1	71	C
APR 15,83	APR 14,83	800 800	930 1400	1	6.9	2	22199	2	1	****	EF
APR 16,83	APR 15,83	800 800	830 1500	1	2.8	2	22200	2	1	95	
APR 20,83	APR 19,83	800 800	830 1600	3	4.2	2	22201	2	1	33	
APR 22,83	APR 21,83	800 800	830 1900	1	7.8	2	22202	2	1	77	
APR 25,83	APR 24,83	800 800	1130 2100	1	2.0	2	22203	2	1	****	EF
APR 29,83	APR 28,83	800 800	900 1600	1	8.8	2	22204	2	1	77	
MAY 1,83	APR 30,83	800 800	1030 1300	1	2.2	2	22205	2	1	94	AC
MAY 2,83	MAY 1,83	800 800	2300 800	1	17.2	2	22206	2	1	104	
MAY 3,83	MAY 2,83	800 800	1845 2300	1	15.4	2	22207	2	1	43	C
MAY 9,83	MAY 8,83	800 800	900 1700	1	5.0	1	22209	2	1	78	
MAY 23,83	MAY 22,83	800 800	1600 400	1	5.0	1	22210	2	1	95	
MAY 26,83	MAY 25,83	800 800	1800 300	1	5.0	1	22211	2	1	****	EG
MAY 30,83	MAY 29,83	800 800	1930 730	1	19.0	1	22212	2	1	94	CD
MAY 31,83	MAY 30,83	800 800	1700 1800	1	0.9	1	22213	2	1	22	CD
JUN 4,83	JUN 3,83	800 800	230 800	1	1.0	1	22215	2	1	18	E
JUN 7,83	JUN 6,83	800 800	1000 1830	1	6.8	1	22216	2	1	92	
JUN 18,83	JUN 17,83	800 800	1400 1530	1	****	1	22217	2	1	****	C
JUN 25,83	JUN 24,83	800 800	2130 2200	1	2.4	1	22218	2	1	110	
JUN 26,83	JUN 25,83	800 800	630 800	1	2.0	1	22219	2	1	70	AC

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH6.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	PAGE : 2
JAN 8,83	JAN 7,83	*****	*****	*****	*****	*****	*****	*****	
JAN 11,83	JAN 10,83	*****	*****	*****	*****	*****	*****	*****	
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****	
JAN 24,83	JAN 23,83	*****	*****	*****	*****	*****	*****	*****	
FEB 1,83	JAN 31,83	*****	*****	*****	*****	*****	*****	*****	
FEB 3,83	FEB 2,83	*****	*****	*****	*****	*****	*****	*****	
FEB 8,83	FEB 7,83	*****	*****	*****	*****	*****	*****	*****	
FEB 23,83	FEB 22,83	827.0	44.0	4.06	4.03	0.1100	4.05	0.68	
MAR 4,83	MAR 3,83	129.0	19.0	*****	4.92	0.0280	1.85	0.67	
MAR 5,83	MAR 4,83	62.0	*****	*****	3.74	0.2220	10.00	1.11	
MAR 7,83	MAR 6,83	*****	*****	*****	*****	*****	*****	*****	
MAR 10,83	MAR 9,83	411.0	29.2	4.32	4.13	0.0806	2.05	0.51	
MAR 20,83	MAR 19,83	1139.0	11.3	*****	4.71	0.0404	0.85	0.21	
MAR 22,83	MAR 21,83	*****	*****	*****	*****	*****	*****	*****	
MAR 28,83	MAR 27,83	*****	*****	*****	*****	*****	*****	*****	
MAR 29,83	MAR 28,83	90.0	19.3	*****	4.40	0.0624	1.05	0.83	
APR 4,83	APR 3,83	444.0	29.8	U 6.93	*****	*****	1.60	0.27	
APR 5,83	APR 4,83	116.0	68.0	*****	3.87	0.1728	4.00	1.50	
APR 8,83	APR 7,83	173.0	78.3	*****	3.82	0.1904	5.85	1.27	
APR 10,83	APR 9,83	498.0	11.3	4.91	4.78	0.0334	0.90	0.17	
APR 11,83	APR 10,83	452.0	16.8	4.73	4.58	0.0446	0.80	0.18	
APR 15,83	APR 14,83	*****	*****	*****	*****	*****	*****	*****	
APR 16,83	APR 15,83	172.0	77.2	*****	3.86	0.1806	5.25	1.53	
APR 20,83	APR 19,83	89.0	*****	*****	4.44	0.0570	2.05	0.22	
APR 22,83	APR 21,83	389.0	8.2	5.22	5.14	0.0266	0.95	0.04	
APR 25,83	APR 24,83	*****	*****	*****	*****	*****	*****	*****	
APR 29,83	APR 28,83	435.0	62.5	4.30	4.30	0.1042	7.60	1.18	
MAY 1,83	APR 30,83	133.0	*****	*****	4.34	0.0754	3.50	0.36	
MAY 2,83	MAY 1,83	1152.0	33.6	4.39	4.30	0.0766	3.50	0.36	
MAY 3,83	MAY 2,83	426.0	27.7	4.51	4.44	0.0626	3.10	0.33	
MAY 9,83	MAY 8,83	252.0	20.5	4.59	*****	*****	2.05	0.13	
MAY 23,83	MAY 22,83	307.0	20.6	4.66	4.62	0.1254	3.05	0.19	
MAY 26,83	MAY 25,83	*****	*****	*****	*****	*****	*****	*****	
MAY 30,83	MAY 29,83	1146.0	29.4	4.35	4.31	0.0754	3.10	0.34	
MAY 31,83	MAY 30,83	13.0	*****	*****	3.73	0.3060	*****	*****	
JUN 4,83	JUN 3,83	12.0	*****	*****	*****	*****	*****	*****	
JUN 7,83	JUN 6,83	405.0	37.7	4.19	4.19	0.0968	4.60	0.33	
JUN 18,83	JUN 17,83	643.0	77.5	3.67	3.92	0.1938	7.90	0.77	
JUN 25,83	JUN 24,83	170.0	*****	*****	U 6.01	0.0178	1.50	0.10	
JUN 26,83	JUN 25,83	91.0	*****	*****	U 4.13	0.1430	15.80	1.42	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 8,83	JAN 7,83	*****	*****	*****	*****	*****	*****	*****
JAN 11,83	JAN 10,83	*****	*****	*****	*****	*****	*****	*****
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****
JAN 24,83	JAN 23,83	*****	*****	*****	*****	*****	*****	*****
FEB 1,83	JAN 31,83	*****	*****	*****	*****	*****	*****	*****
FEB 3,83	FEB 2,83	*****	*****	*****	*****	*****	*****	*****
FEB 8,83	FEB 7,83	*****	*****	*****	*****	*****	*****	*****
FEB 23,83	FEB 22,83	0.07	0.17	0.015	0.035	0.080	0.690	0.0933
MAR 4,83	MAR 3,83	1.04	0.38	0.165	0.105	0.285	*****	0.0120
MAR 5,83	MAR 4,83	*****	0.54	*****	*****	*****	*****	0.1820
MAR 7,83	MAR 6,83	*****	*****	*****	*****	*****	*****	*****
MAR 10,83	MAR 9,83	0.10	0.09	0.020	0.010	0.045	0.142	0.0741
MAR 20,83	MAR 19,83	0.05	0.11	0.015	0.015	0.065	0.116	0.0195
MAR 22,83	MAR 21,83	*****	*****	*****	*****	*****	*****	*****
MAR 28,83	MAR 27,83	*****	*****	*****	*****	*****	*****	*****
MAR 29,83	MAR 28,83	0.06	0.03	0.010	0.020	0.035	*****	0.0398
APR 4,83	APR 3,83	*****	0.76	*****	*****	*****	0.052	*****
APR 5,83	APR 4,83	0.32	0.28	0.065	0.050	0.120	0.570	0.1349
APR 8,83	APR 7,83	0.25	0.16	0.030	0.050	0.030	0.490	0.1514
APR 10,83	APR 9,83	0.14	0.07	0.020	0.040	0.020	0.056	0.0166
APR 11,83	APR 10,83	0.05	0.06	0.010	0.030	0.020	0.104	0.0263
APR 15,83	APR 14,83	*****	*****	*****	*****	*****	*****	*****
APR 16,83	APR 15,83	0.62	0.29	0.090	0.040	0.020	0.400	0.1380
APR 20,83	APR 19,83	0.15	0.94	0.090	0.040	0.580	0.132	0.0363
APR 22,83	APR 21,83	0.05	0.04	0.015	0.020	0.055	0.244	0.0072
APR 25,83	APR 24,83	*****	*****	*****	*****	*****	*****	*****
APR 29,83	APR 28,83	6 1.43	0.29	0.230	0.130	0.115	1.410	0.0501
MAY 1,83	APR 30,83	D 0.36	0.12	0.050	0.080	0.085	0.510	0.0457
MAY 2,83	MAY 1,83	0.28	0.10	0.045	0.075	0.060	0.480	0.0501
MAY 3,83	MAY 2,83	0.36	0.13	0.065	0.050	0.100	0.500	0.0363
MAY 9,83	MAY 8,83	0.12	0.07	0.025	0.040	0.025	0.144	*****
MAY 23,83	MAY 22,83	0.59	0.06	0.030	0.060	0.055	0.312	0.0240
MAY 26,83	MAY 25,83	*****	*****	*****	*****	*****	*****	*****
MAY 30,83	MAY 29,83	0.12	0.08	0.035	0.050	0.050	0.380	0.0490
MAY 31,83	MAY 30,83	*****	*****	*****	*****	*****	*****	0.1862
JUN 4,83	JUN 3,83	*****	*****	*****	*****	*****	*****	*****
JUN 7,83	JUN 6,83	0.05	0.05	0.005	0.030	0.030	0.620	0.0646
JUN 18,83	JUN 17,83	0.28	0.22	0.040	0.040	0.045	0.580	0.1202
JUN 25,83	JUN 24,83	0.59	0.08	0.115	0.115	0.045	0.018	U 0.0010
JUN 26,83	JUN 25,83	*****	0.49	*****	*****	*****	U 2.450	U 0.0741

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITHAM CREEK/DAILY/AEROCHEM #09

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
JUN 27,83	JUN 26,83	800 800	2300 800	1	16.0	1	22220	2	1	71	C
JUL 5,83	JUL 4,83	800 800	2000 300	1	16.8	1	22221	2	1	88	CD
JUL 9,83	JUL 8,83	800 800	1700 1830	1	1.0	1	22222	2	1	46	N
JUL 29,83	JUL 28,83	800 800	1500 1800	1	1.0	1	22223	2	1	84	C
JUL 30,83	JUL 29,83	800 800	30 130	1	12.0	1	22224	2	1	99	AC
AUG 1,83	JUL 31,83	800 800	830 400	1	13.3	1	22225	2	1	97	M
AUG 7,83	AUG 6,83	800 800	2015 2055	1	11.0	1	22226	2	1	89	C
AUG 9,83	AUG 8,83	800 800	1715 1755	1	2.1	1	22227	2	1	93	AC
AUG 12,83	AUG 11,83	800 800	900 1800	1	2.6	1	22228	2	1	50	HM
AUG 16,83	AUG 15,83	800 800	300 430	1	8.0	1	22229	2	1	135	C
AUG 21,83	AUG 20,83	800 800	400 800	1	13.0	1	22230	2	1	107	NHM
AUG 26,83	AUG 25,83	800 800	1500 1630	1	16.0	1	22231	2	1	89	AC
AUG 31,83	AUG 30,83	800 800	****	1	1.3	1	22232	2	1	52	AC
SEP 6,83	SEP 5,83	800 800	600 630	1	2.4	1	22233	2	1	100	
SEP 10,83	SEP 9,83	800 800	2300 2315	1	4.2	1	22234	2	1	92	J
SEP 17,83	SEP 16,83	800 800	1500 2300	1	12.6	1	22235	2	1	137	N
SEP 18,83	SEP 17,83	800 800	1030 1500	1	2.4	1	22236	2	1	83	
SEP 19,83	SEP 18,83	800 800	2300 30	1	2.8	1	22237	2	1	81	
SEP 22,83	SEP 21,83	800 800	900 1600	1	25.0	1	22238	2	1	111	
OCT 4,83	OCT 3,83	800 800	200 400	1	1.8	1	22239	2	1	62	C
OCT 5,83	OCT 4,83	800 800	1400 600	1	16.8	1	22240	2	1	98	
OCT 6,83	OCT 5,83	800 800	900 500	1	37.4	1	22241	2	1	111	
OCT 8,83	OCT 7,83	800 800	730 800	1	1.0	1	22242	2	1	67	C
OCT 9,83	OCT 8,83	800 800	900 1900	1	5.4	1	22243	2	1	88	
OCT 12,83	OCT 11,83	800 800	300 800	1	1.2	1	22244	2	1	19	N
OCT 13,83	OCT 12,83	800 800	200 700	1	16.6	1	22245	2	1	97	HCH
OCT 14,83	OCT 13,83	800 800	800 200	1	16.0	1	22246	2	1	101	
OCT 15,83	OCT 14,83	800 800	930 1300	1	3.2	1	22247	2	1	56	
OCT 23,83	OCT 22,83	800 800	300 730	1	3.6	1	22248	2	1	53	
OCT 24,83	OCT 23,83	800 800	800 700	1	15.4	1	22249	2	1	84	
OCT 26,83	OCT 25,83	800 800	800 200	1	1.8	1	22250	2	1	39	N
OCT 27,83	OCT 26,83	800 800	2100 100	1	2.0	1	22251	2	1	57	C
NOV 3,83	NOV 2,83	800 800	730 800	1	23.4	1	22252	2	1	99	
NOV 4,83	NOV 3,83	800 800	300 800	2	***	1	22253	2	1	***	J
NOV 11,83	NOV 10,83	800 800	2000 200	1	9.2	1	22254	2	1	73	J
NOV 21,83	NOV 20,83	800 800	****	3	***	1	22255	2	1	***	
NOV 24,83	NOV 23,83	800 800	****	2	***	1	22256	2	1	***	
NOV 29,83	NOV 28,83	800 800	800 200	3	10.5	2	22257	2	1	64	J
DEC 3,83	DEC 2,83	800 800	1030 100	2	4.2	2	22258	2	1	34	N
DEC 5,83	DEC 4,83	800 800	830 2100	2	10.8	2	22259	2	1	21	C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH0.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JUN 27,83	JUN 26,83	736.0	65.5	3.99	4.04	0.1462	7.65	0.90
JUL 5,83	JUL 4,83	948.0	30.5	6.82	4.26	0.0790	3.40	0.29
JUL 9,83	JUL 8,83	30.0	*****	*****	G	0.0236	5.10	0.91
JUL 29,83	JUL 28,83	54.0	*****	*****	3.88	0.2520	13.80	1.68
JUL 30,83	JUL 29,83	768.0	19.3	4.41	4.72	0.0478	1.70	0.32
AUG 1,83	JUL 31,83	835.0	50.0	4.01	4.18	0.1188	4.70	0.50
AUG 7,83	AUG 6,83	634.0	24.2	4.38	4.49	0.0644	2.55	0.18
AUG 9,83	AUG 8,83	126.0	17.3	*****	U	0.0160	2.65	0.69
AUG 12,83	AUG 11,83	91.0	*****	*****	4.39	0.0876	3.30	0.43
AUG 18,83	AUG 17,83	697.0	120.0	3.51	3.78	*****	11.20	1.12
AUG 21,83	AUG 20,83	897.0	24.5	4.29	4.45	0.0582	2.35	0.19
AUG 28,83	AUG 27,83	921.0	18.0	4.51	4.61	0.0518	1.85	0.22
AUG 31,83	AUG 30,83	44.0	*****	*****	4.68	0.0508	1.55	0.54
SEP 6,83	SEP 5,83	143.0	*****	*****	3.63	0.3180	G 17.80	1.44
SEP 10,83	SEP 9,83	250.0	22.0	4.13	4.63	0.0512	2.30	0.43
SEP 17,83	SEP 16,83	1132.0	57.3	3.85	4.02	0.1008	4.30	0.94
SEP 18,83	SEP 17,83	128.0	22.5	*****	4.45	0.0388	1.80	0.36
SEP 19,83	SEP 18,83	146.0	55.3	*****	4.12	0.0808	5.75	1.00
SEP 22,83	SEP 21,83	1780.0	17.5	4.71	4.46	0.0530	2.10	0.20
OCT 4,83	OCT 3,83	72.0	62.0	*****	4.00	0.1430	7.80	1.25
OCT 5,83	OCT 4,83	1065.0	40.2	3.90	4.15	0.0984	4.75	0.57
OCT 6,83	OCT 5,83	2679.0	10.3	4.46	4.71	0.0362	1.05	0.10
OCT 8,83	OCT 7,83	43.0	*****	*****	4.20	0.1020	5.50	1.59
OCT 9,83	OCT 8,83	306.0	31.0	4.12	4.29	0.0730	4.00	0.56
OCT 12,83	OCT 11,83	15.0	*****	*****	G	0.0172	*****	*****
OCT 13,83	OCT 12,83	1037.0	5.4	4.79	5.27	0.0242	0.25	0.13
OCT 14,83	OCT 13,83	1036.0	10.8	4.64	4.75	0.0356	0.85	0.16
OCT 15,83	OCT 14,83	116.0	15.8	*****	4.62	0.0466	1.45	0.28
OCT 23,83	OCT 22,83	123.0	27.7	*****	4.35	0.0672	1.90	0.69
OCT 24,83	OCT 23,83	832.0	11.5	4.63	4.80	0.0368	0.80	0.13
OCT 26,83	OCT 25,83	45.0	*****	*****	4.40	0.0760	3.45	0.88
OCT 27,83	OCT 26,83	74.0	*****	*****	5.07	0.0306	1.10	0.15
NOV 3,83	NOV 2,83	1499.0	26.6	4.04	4.35	0.0742	2.90	0.50
NOV 4,83	NOV 3,83	295.0	10.5	4.36	4.91	0.0340	1.15	0.12
NOV 11,83	NOV 10,83	435.0	10.7	4.29	5.02	0.0240	0.90	0.11
NOV 21,83	NOV 20,83	629.0	22.4	4.03	4.41	0.0564	1.65	0.40
NOV 24,83	NOV 23,83	83.0	*****	*****	3.94	0.1384	*****	*****
NOV 29,83	NOV 28,83	432.0	14.9	3.77	4.61	0.0416	1.45	0.18
DEC 3,83	DEC 2,83	93.0	*****	*****	4.39	0.0676	4.15	0.80
DEC 5,83	DEC 4,83	147.0	9.0	*****	5.05	0.0258	0.50	0.23

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUN 27,83	JUN 26,83	0.58	0.24	0.125	0.070	0.055	1.000	0.0912
JUL 5,83	JUL 4,83	0.17	0.12	0.040	0.025	0.050	0.246	0.0550
JUL 9,83	JUL 8,83	*****	0.22	*****	*****	*****	*****	G 0.0002
JUL 29,83	JUL 28,83	*****	0.57	*****	*****	*****	*****	0.1318
JUL 30,83	JUL 29,83	0.30	0.11	0.025	0.015	0.030	0.200	0.0191
AUG 1,83	JUL 31,83	0.12	0.12	0.010	0.030	0.045	0.440	0.0661
AUG 7,83	AUG 6,83	0.24	0.06	0.030	0.015	0.045	0.132	0.0324
AUG 9,83	AUG 8,83	U 2.08	0.11	0.025	0.070	0.045	0.400	U 0.0001
AUG 12,83	AUG 11,83	0.36	0.14	0.050	0.030	0.025	0.180	0.0407
AUG 18,83	AUG 17,83	0.33	0.22	0.085	0.060	0.040	0.610	0.1660
AUG 21,83	AUG 20,83	0.16	0.09	0.035	0.040	0.070	0.218	0.0355
AUG 28,83	AUG 27,83	0.12	0.04	0.015	0.025	0.010	0.280	0.0245
AUG 31,83	AUG 30,83	*****	0.07	*****	*****	*****	0.860	0.0209
SEP 6,83	SEP 5,83	1.06	0.34	0.235	G 0.265	0.080	1.590	0.2344
SEP 10,83	SEP 9,83	0.62	0.23	0.085	0.100	0.120	0.174	0.0234
SEP 17,83	SEP 16,83	0.29	0.29	0.055	0.030	0.145	0.440	0.0955
SEP 18,83	SEP 17,83	0.25	0.07	0.010	0.025	0.040	0.146	0.0355
SEP 19,83	SEP 18,83	1.05	0.19	0.145	0.120	0.060	0.660	0.0759
SEP 22,83	SEP 21,83	0.11	0.05	0.010	0.045	0.005	0.210	0.0347
OCT 4,83	OCT 3,83	1.24	0.29	0.030	0.070	0.005	0.530	0.1000
OCT 5,83	OCT 4,83	0.29	0.13	0.030	0.050	0.005	0.600	0.0708
OCT 6,83	OCT 5,83	0.02	0.03	0.005	<T 0.015	0.005	0.064	0.0195
OCT 8,83	OCT 7,83	*****	0.39	*****	*****	*****	*****	0.0631
OCT 9,83	OCT 8,83	0.53	0.12	0.065	0.055	0.005	0.430	0.0513
OCT 12,83	OCT 11,83	*****	*****	*****	*****	*****	*****	G 0.0001
OCT 13,83	OCT 12,83	0.04	0.16	0.010	<T 0.010	0.005	0.054	G 0.0054
OCT 14,83	OCT 13,83	0.06	<W 0.01	0.010	<T 0.015	0.015	0.104	0.0178
OCT 15,83	OCT 14,83	0.14	0.04	0.015	0.040	0.060	0.204	0.0240
OCT 23,83	OCT 22,83	0.24	0.21	0.045	0.090	0.200	*****	0.0447
OCT 24,83	OCT 23,83	0.10	0.02	0.005	<T 0.015	0.025	0.092	0.0158
OCT 26,83	OCT 25,83	*****	0.24	*****	*****	*****	*****	0.0398
OCT 27,83	OCT 26,83	*****	0.01	*****	*****	*****	0.102	0.0085
NOV 3,83	NOV 2,83	0.19	<W 0.01	0.030	0.040	0.030	0.344	0.0447
NOV 4,83	NOV 3,83	0.02	<W 0.01	0.010	0.045	0.020	0.160	0.0123
NOV 11,83	NOV 10,83	*****	0.12	*****	*****	*****	*****	0.0095
NOV 21,83	NOV 20,83	0.05	0.12	0.010	0.025	0.050	0.234	0.0389
NOV 24,83	NOV 23,83	0.54	*****	0.070	0.075	0.250	0.276	0.1148
NOV 29,83	NOV 28,83	0.10	*****	0.015	0.030	0.025	0.134	0.0245
DEC 3,83	DEC 2,83	0.72	0.07	0.120	0.115	0.240	0.720	0.0407
DEC 5,83	DEC 4,83	0.23	0.13	0.030	0.025	0.045	<T 0.002	0.0089

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM 809

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-MOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
DEC 6,83	DEC 5,83	800 800	1700 800	3	10.2	2	22266	2	1	U	4 EFI N
DEC 7,83	DEC 6,83	800 800	830 400	3	12.8	2	22267	2	1	U	4 EFI N
DEC 13,83	DEC 12,83	800 800	400 2300	3	6.2	2	22268	2	1	U	4 EFI N
DEC 22,83	DEC 21,83	800 800	2000 800	2	4.6	2	22269	2	1	U	4 EFI N
DEC 23,83	DEC 22,83	800 800	800 1800	3	4.0	2	22270	2	1	U	4 EFI N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

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PART VI

NORTHWESTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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STATION NAME : FERNBERG/DAILY/AEROCHEM

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-OTHER	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
JAN 5,83	JAN 4,83	830 830	900 1000	2	2.1	2	32074	2	1	26	C N
JAN 6,83	JAN 5,83	830 830	900 1200	2	5.9	2	32075	2	1	79	CQ
JAN 10,83	JAN 9,83	830 1100	2300 1030	2	12.9	2	32076	2	1	78	D
JAN 13,83	JAN 12,83	830 830	100 830	2	9.3	2	32077	2	1	42	C N
JAN 14,83	JAN 13,83	830 830	830 1200	2	2.5	2	32078	2	1	48	D N
JAN 29,83	JAN 28,83	830 830	1200 600	2	15.7	2	32079	2	1	74	DC
FEB 9,83	FEB 8,83	830 830	1100 300	2	1.9	2	32080	2	1	68	D
FEB 19,83	FEB 18,83	830 830	1700 2400	2	10.9	2	32081	2	1	92	D
FEB 27,83	FEB 26,83	830 830	1100 1700	1	2.7	2	32082	2	1	51	D
MAR 4,83	MAR 3,83	830 830	1200 1500	2	5.1	2	32083	2	1	101	
MAR 5,83	MAR 4,83	830 830	2400 200	2	1.3	2	32084	2	1	69	C
MAR 15,83	MAR 14,83	830 830	1100 1500	3	0.6	2	32085	2	1	70	
MAR 17,83	MAR 16,83	830 830	100 300	2	1.6	2	32086	2	1	99	CD
MAR 31,83	MAR 30,83	830 830	830 830	3	1.7	2	32087	2	1	29	C N
APR 1,83	MAR 31,83	830 830	1200 1500	2	3.3	2	32088	2	1	70	C
APR 7,83	APR 6,83	830 830	300 600	2	6.6	2	32089	2	1	29	CD
APR 15,83	APR 14,83	830 830	1000 1800	2	22.9	2	32090	2	1	3	CD N
APR 17,83	APR 16,83	830 830	1300 830	3	1.5	2	32091	2	1	148	CD N
APR 27,83	APR 26,83	830 830	****	1	0.1	1	32093	2	1	****	EK
APR 29,83	APR 28,83	830 830	1800 2000	1	5.0	2	32092	2	1	82	CD
MAY 10,83	MAY 9,83	830 830	300 500	1	****	1	32094	2	1	****	CD
MAY 13,83	MAY 12,83	830 830	300 600	1	12.2	1	32095	2	1	72	D
MAY 18,83	MAY 17,83	830 830	****	1	4.1	1	32096	2	1	98	D
MAY 19,83	MAY 18,83	830 830	830 1200	1	4.0	1	32097	2	1	98	D
MAY 22,83	MAY 21,83	830 830	****	1	4.5	1	32098	2	1	96	CD
MAY 29,83	MAY 28,83	830 830	****	1	21.2	1	32099	2	1	97	D
MAY 30,83	MAY 29,83	830 830	****	1	2.9	1	32100	2	1	53	D
JUN 11,83	JUN 10,83	830 830	****	1	19.4	1	32103	2	1	36	ACD
JUN 13,83	JUN 12,83	830 830	****	1	6.5	1	32104	2	1	101	CD
JUN 16,83	JUN 15,83	830 830	1300 1430	1	28.0	1	32101	2	1	95	D
JUN 22,83	JUN 21,83	830 830	600 715	1	1.8	1	32102	2	1	71	D
JUL 1,83	JUN 30,83	830 830	1800 2000	1	9.0	1	32105	2	1	37	DG
JUL 3,83	JUL 2,83	830 830	****	1	18.0	1	32106	2	1	37	D
JUL 4,83	JUL 3,83	830 830	2400 730	1	48.3	1	32107	2	1	111	D
JUL 14,83	JUL 13,83	830 830	200 700	1	15.8	1	32108	2	1	39	CD
JUL 30,83	JUL 29,83	800 800	2200 2400	1	8.1	1	32109	2	1	87	CD
AUG 1,83	JUL 30,83	800 800	1000 1200	1	10.2	1	32110	2	1	91	CD
AUG 3,83	AUG 2,83	830 830	1100 1300	1	8.0	1	32111	2	1	78	CD
AUG 8,83	AUG 7,83	830 830	200 300	1	0.1	1	32112	2	1	****	E
AUG 10,83	AUG 9,83	830 830	300 500	1	15.0	1	32113	2	1	102	D

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEN #16									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	PAGE : 2
JAN 5,83	JAN 4,83	36.0	*****	*****	4.66	0.0442	0.35	0.27	
JAN 6,83	JAN 5,83	300.0	5.2	*****	5.04	0.0362	0.15	0.13	
JAN 10,83	JAN 9,83	648.0	9.5	*****	4.70	0.0462	0.40	0.27	
JAN 13,83	JAN 12,83	253.0	7.5	*****	4.75	0.0404	0.30	0.21	
JAN 14,83	JAN 13,83	77.0	*****	*****	4.81	0.0386	0.25	0.19	
JAN 29,83	JAN 28,83	750.0	13.3	*****	4.53	0.0524	1.05	0.28	
FEB 9,83	FEB 8,83	84.0	*****	*****	*****	*****	1.00	0.97	
FEB 19,83	FEB 18,83	644.0	9.1	*****	4.91	0.0348	0.65	0.26	
FEB 27,83	FEB 26,83	89.0	*****	*****	5.13	0.0502	0.65	0.24	
MAR 4,83	MAR 3,83	333.0	21.7	*****	6.80	0.0294	3.35	0.79	
MAR 5,83	MAR 4,83	58.0	*****	*****	*****	*****	3.60	0.82	
MAR 15,83	MAR 14,83	27.0	*****	*****	4.93	0.0302	1.05	0.13	
MAR 17,83	MAR 16,83	102.0	*****	*****	6.30	0.0146	0.10	0.05	
MAR 31,83	MAR 30,83	32.0	*****	*****	5.19	0.0296	1.35	0.42	
APR 1,83	MAR 31,83	150.0	*****	*****	4.32	0.1526	2.95	0.56	
APR 7,83	APR 6,83	123.0	*****	*****	5.12	0.0280	0.40	0.12	
APR 15,83	APR 14,83	56.0	*****	*****	5.01	0.0304	0.90	0.12	
APR 17,83	APR 16,83	143.0	*****	*****	4.69	0.0420	1.70	0.10	
APR 27,83	APR 26,83	*****	*****	*****	*****	*****	*****	*****	
APR 29,83	APR 28,83	263.0	19.3	*****	7.07	0.0224	2.70	0.48	
MAY 10,83	MAY 9,83	27.0	*****	*****	5.94	0.0264	*****	*****	
MAY 13,83	MAY 12,83	569.0	2.2	*****	6.04	0.0178	0.05	0.01	
MAY 18,83	MAY 17,83	259.0	18.1	*****	4.54	0.0532	1.60	0.19	
MAY 19,83	MAY 18,83	253.0	18.4	*****	4.55	0.0532	1.55	0.19	
MAY 22,83	MAY 21,83	279.0	7.8	*****	*****	0.0348	0.90	0.21	
MAY 29,83	MAY 28,83	1321.0	7.3	*****	5.23	0.0270	0.75	0.09	
MAY 30,83	MAY 29,83	99.0	*****	*****	*****	*****	1.40	0.03	
JUN 11,83	JUN 10,83	458.0	7.4	*****	6.17	0.0170	0.95	0.24	
JUN 13,83	JUN 12,83	423.0	16.0	*****	5.17	0.0290	2.95	0.45	
JUN 16,83	JUN 15,83	1711.0	8.7	*****	5.12	0.0268	1.15	0.14	
JUN 22,83	JUN 21,83	83.0	*****	*****	6.05	0.0254	5.05	0.88	
JUL 1,83	JUN 30,83	215.0	5.6	*****	5.33	0.0202	0.60	0.12	
JUL 3,83	JUL 2,83	431.0	5.6	*****	5.28	0.0204	0.60	0.12	
JUL 4,83	JUL 3,83	3443.0	5.7	*****	5.28	0.0202	0.55	0.12	
JUL 14,83	JUL 13,83	404.0	8.6	*****	5.69	0.0240	1.25	0.19	
JUL 30,83	JUL 29,83	456.0	7.1	*****	5.09	0.0272	0.50	0.16	
AUG 1,83	JUL 30,83	598.0	6.8	*****	5.22	0.0262	0.50	0.16	
AUG 3,83	AUG 2,83	405.0	16.0	*****	5.66	0.0258	2.00	0.70	
AUG 8,83	AUG 7,83	*****	*****	*****	*****	*****	*****	*****	
AUG 10,83	AUG 9,83	989.0	5.0	*****	5.26	0.0236	0.40	0.07	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM				#16	PAGE : 3			
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 5,83	JAN 4,83	*****	*****	*****	*****	*****	*****	0.0219
JAN 6,83	JAN 5,83	<T 0.02	0.06	<W 0.005	<T 0.010	<T 0.010	0.076	0.0091
JAN 10,83	JAN 9,83	<W 0.01	0.05	0.005	0.015	<T 0.005	0.092	0.0200
JAN 13,83	JAN 12,83	0.07	0.10	0.020	0.015	0.025	0.016	0.0178
JAN 14,83	JAN 13,83	*****	0.10	*****	*****	*****	*****	0.0155
JAN 29,83	JAN 28,83	0.03	0.10	<T 0.005	0.020	0.030	0.264	0.0295
FEB 9,83	FEB 8,83	0.11	0.08	0.015	0.025	0.030	*****	*****
FEB 19,83	FEB 18,83	0.06	0.07	0.010	0.010	<W 0.005	0.180	0.0123
FEB 27,83	FEB 26,83	0.17	0.05	0.025	U 0.160	U 0.165	0.0074	*****
MAR 4,83	MAR 3,83	0.25	0.10	0.020	0.035	0.040	1.890	G 0.0002
MAR 5,83	MAR 4,83	*****	0.30	*****	*****	*****	1.940	*****
MAR 15,83	MAR 14,83	*****	0.25	*****	*****	*****	*****	0.0117
MAR 17,83	MAR 16,83	0.06	0.07	0.010	0.020	0.050	*****	G 0.0005
MAR 31,83	MAR 30,83	*****	0.25	*****	*****	*****	*****	0.0065
APR 1,83	MAR 31,83	0.12	0.10	0.020	0.030	0.030	0.392	0.0479
APR 7,83	APR 6,83	0.11	0.08	0.015	0.030	0.030	0.056	0.0076
APR 15,83	APR 14,83	*****	0.08	*****	*****	*****	*****	0.0098
APR 17,83	APR 16,83	0.10	0.23	0.015	0.050	G 0.135	0.112	0.0204
APR 27,83	APR 26,83	*****	*****	*****	*****	*****	*****	*****
APR 29,83	APR 28,83	U 1.37	0.10	U 0.100	0.080	0.055	U 1.070	U 0.0001
MAY 10,83	MAY 9,83	*****	*****	*****	*****	*****	*****	0.0011
MAY 13,83	MAY 12,83	0.04	0.21	0.005	0.075	0.215	0.124	U 0.0039
MAY 18,83	MAY 17,83	0.07	0.05	0.015	0.030	0.020	0.220	0.0288
MAY 19,83	MAY 18,83	0.07	0.05	0.015	0.030	0.025	0.220	0.0282
MAY 22,83	MAY 21,83	0.16	0.03	0.045	0.040	0.020	0.620	U 0.0002
MAY 29,83	MAY 28,83	0.07	0.03	0.010	0.045	0.055	0.220	0.0059
MAY 30,83	MAY 29,83	0.05	0.08	0.010	0.075	0.045	0.166	*****
JUN 11,83	JUN 10,83	0.18	0.16	0.030	0.060	0.040	0.430	0.0007
JUN 13,83	JUN 12,83	0.54	0.29	0.095	0.120	0.125	0.660	0.0068
JUN 16,83	JUN 15,83	0.10	0.17	0.020	0.075	0.035	0.206	0.0076
JUN 22,83	JUN 21,83	*****	U 0.43	*****	*****	*****	*****	U 0.0009
JUL 1,83	JUN 30,83	0.08	0.15	0.010	0.035	0.040	0.136	0.0047
JUL 3,83	JUL 2,83	0.06	0.13	0.010	0.020	0.020	0.148	0.0052
JUL 4,83	JUL 3,83	0.08	0.12	0.010	0.100	0.115	0.142	0.0052
JUL 14,83	JUL 13,83	0.32	0.06	0.040	0.090	0.065	0.430	0.0020
JUL 30,83	JUL 29,83	0.07	0.04	0.025	0.050	0.030	0.106	0.0081
AUG 1,83	JUL 30,83	0.10	0.04	0.035	0.060	0.030	0.118	0.0060
AUG 3,83	AUG 2,83	U 0.52	0.21	0.085	0.095	0.100	0.830	0.0022
AUG 8,83	AUG 7,83	*****	*****	*****	*****	*****	*****	*****
AUG 10,83	AUG 9,83	0.05	0.02	<W 0.005	0.020	<W 0.005	0.124	0.0055

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16										PAGE : 4	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN 02-SHOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		
AUG 11,83	AUG 10,83	830 830	830 1100	1	1.0	1	32114	2	1	***	E
AUG 14,83	AUG 13,83	830 830	900 1300	1	6.7	1	32116	2	1	76	ACD
AUG 20,83	AUG 19,83	830 830	200 300	1	28.4	1	32117	2	1	93	ACD
AUG 21,83	AUG 20,83	830 830	300 400	1	7.8	1	32118	2	1	98	CD
AUG 24,83	AUG 23,83	830 830	200 400	1	29.4	1	32119	2	1	108	C
AUG 25,83	AUG 24,83	830 830	200 400	1	11.2	1	32120	2	1	116	CD
AUG 27,83	AUG 26,83	830 830	2200 2400	1	8.8	1	32121	2	1	75	C
AUG 30,83	AUG 29,83	830 830	900 1100	1	7.0	1	32122	2	1	92	ACD
SEP 4,83	SEP 3,83	830 830	900 1030	1	4.1	1	32123	2	1	81	D
SEP 5,83	SEP 4,83	830 830	1900 2400	1	2.6	1	32124	2	1	87	CD
SEP 6,83	SEP 5,83	830 830	2400 730	1	6.8	1	32125	2	1	97	C
SEP 9,83	SEP 8,83	830 830	2330 400	1	90.6	1	32126	2	1	8	N
SEP 10,83	SEP 9,83	830 830	300 800	1	17.2	1	32127	2	1	83	N
SEP 15,83	SEP 14,83	830 830	1200 1300	1	2.0	1	32128	2	1	56	C
SEP 16,83	SEP 15,83	830 830	1200 400	1	10.0	1	32129	2	1	101	C
SEP 18,83	SEP 17,83	830 830	1800 2000	1	5.2	1	32130	2	1	100	C
SEP 23,83	SEP 22,83	830 830	1000 1200	1	7.0	1	32136	2	1	106	AD
SEP 29,83	SEP 28,83	830 830	200 600	1	14.4	1	32137	2	1	99	CD
SEP 30,83	SEP 29,83	830 830	200 600	1	24.2	1	32138	2	1	105	CD
OCT 1,83	SEP 30,83	830 900	400 845	1	7.2	1	32139	2	1	99	CD
OCT 3,83	OCT 2,83	830 900	600 830	1	13.4	1	32140	2	1	96	CD
OCT 4,83	OCT 3,83	900 830	***	1	0.2	1	32141	2	1	***	E
OCT 5,83	OCT 4,83	830 830	1200 400	1	13.2	1	32142	2	1	90	E
OCT 6,83	OCT 5,83	830 830	2300 2340	1	0.5	1	32143	2	1	***	E
OCT 8,83	OCT 7,83	830 830	830 1130	1	10.2	1	32144	2	1	89	C
OCT 11,83	OCT 10,83	830 830	1000 1300	1	18.0	1	32145	2	1	93	C
OCT 14,83	OCT 13,83	830 830	*** 2230	3	12.4	1	32146	2	1	53	C
OCT 16,83	OCT 15,83	830 830	1600 1830	1	20.0	2	32147	2	1	87	CQ
NOV 10,83	NOV 9,83	830 830	2400 600	2	2.5	2	32148	2	1	26	C
NOV 19,83	NOV 18,83	830 830	***	3	***	2	32149	2	1	***	C
NOV 20,83	NOV 19,83	830 830	1900 2200	3	23.5	2	32150	2	1	84	C
NOV 21,83	NOV 20,83	830 900	1100 1800	3	10.6	2	32152	2	1	65	C
NOV 24,83	NOV 23,83	830 900	***	2	35.2	2	32153	2	1	0	IM
NOV 29,83	NOV 28,83	830 830	***	2	14.7	2	32154	2	1	47	CD
DEC 11,83	DEC 10,83	830 830	900 1400	2	15.4	2	32155	2	1	11	D
DEC 14,83	DEC 13,83	830 830	830 1400	2	0.1	2	32156	2	1	***	E

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16										PAGE : 5	
REMOVAL DATE	EXPOSURE DATE	VOLUME	CONDUCT.	PH FIELD	PH LAB	TOTAL H+ TO PH0.3	SULPHATE	NITRATE			
		ML	UMHO/CM			MG/L	MG/L	AS N			
						MG/L		MG/L			
AUG 11,83	AUG 10,83	*****	*****	*****	*****	*****	*****	*****			
AUG 13,AUG 14,83	AUG 13,83	328.0	10.8	*****	G 6.82	0.0212	1.15	0.39			
AUG 20,83	AUG 19,83	1694.0	8.3	*****	G 6.74	0.0170	1.05	0.22			
AUG 21,83	AUG 20,83	490.0	10.4	*****	G 6.84	0.0160	1.60	0.27			
AUG 24,83	AUG 23,83	2045.0	5.9	*****	5.37	0.0240	0.65	0.09			
AUG 25,83	AUG 24,83	836.0	*****	*****	5.83	0.0216	0.65	0.15			
AUG 27,83	AUG 26,83	424.0	8.0	*****	5.08	0.0290	0.60	0.14			
AUG 30,83	AUG 29,83	415.0	8.5	*****	6.24	0.0208	1.30	0.33			
SEP 4,83	SEP 3,83	215.0	14.1	*****	4.93	0.0362	2.10	0.46			
SEP 5,83	SEP 4,83	146.0	3.4	*****	G 6.41	0.0160	0.30	0.01			
SEP 6,83	SEP 5,83	427.0	3.4	*****	5.58	0.0202	0.25	0.06			
SEP 9,83	SEP 8,83	470.0	4.5	*****	G 6.44	0.0172	0.60	0.12			
SEP 10,83	SEP 9,83	916.0	4.5	*****	5.32	0.0232	0.30	0.11			
SEP 15,83	SEP 14,83	72.0	10.8	*****	4.77	0.0382	1.35	0.01			
SEP 16,83	SEP 15,83	652.0	10.0	*****	4.73	0.0396	0.75	0.16			
SEP 18,83	SEP 17,83	334.0	16.3	*****	4.65	0.0462	2.05	0.39			
SEP 23,83	SEP 22,83	479.0	4.5	*****	5.97	0.0202	0.60	0.02			
SEP 29,83	SEP 28,83	915.0	9.0	*****	5.42	0.0242	1.30	0.18			
SEP 30,83	SEP 29,83	1642.0	9.3	*****	U 6.48	0.0236	1.65	0.23			
OCT 1,83	SEP 30,83	457.0	11.2	*****	5.36	0.0242	1.65	0.27			
OCT 3,83	OCT 2,83	827.0	8.2	*****	5.75	0.0208	1.05	0.19			
OCT 4,83	OCT 3,83	*****	*****	*****	*****	*****	*****	*****			
OCT 5,83	OCT 4,83	762.0	5.1	*****	5.77	0.0204	0.65	0.09			
OCT 6,83	OCT 5,83	*****	*****	*****	*****	*****	*****	*****			
OCT 8,83	OCT 7,83	583.0	5.0	*****	5.54	0.0190	0.40	0.08			
OCT 11,83	OCT 10,83	1077.0	11.8	*****	4.79	0.0384	1.20	0.18			
OCT 14,83	OCT 13,83	429.0	4.5	*****	5.43	0.0216	0.25	0.09			
OCT 16,83	OCT 15,83	1125.0	8.5	*****	5.06	0.0272	0.90	0.10			
NOV 10,83	NOV 9,83	43.0	*****	*****	5.62	0.0184	0.25	0.13			
NOV 19,83	NOV 18,83	42.0	*****	*****	5.12	0.0262	0.90	0.24			
NOV 20,83	NOV 19,83	1270.0	16.5	*****	4.57	0.0438	1.40	0.26			
NOV 21,83	NOV 20,83	443.0	10.5	*****	4.75	0.0342	0.95	0.08			
NOV 24,83	NOV 23,83	19.0	*****	*****	U 7.38	0.0144	0.40	0.07			
NOV 29,83	NOV 28,83	443.0	5.5	*****	5.38	0.0212	0.35	0.07			
DEC 11,83	DEC 10,83	110.0	*****	*****	5.34	0.0228	0.35	0.07			
DEC 14,83	DEC 13,83	*****	*****	*****	*****	*****	*****	*****			

APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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FREE H+

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEN #13											PAGE : 1
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(HM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN 02-SHOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES		
JAN 16,83	JAN 15,83	830 800	300 800	2	0.3	2	33707	2	1	****	E
JAN 24,83	JAN 23,83	900 900	1000 1600	2	0.5	2	33709	2	1	56	D
FEB 12,83	FEB 11,83	830 830	830 300	2	2.1	2	33717	2	1	175	C
FEB 28,83	FEB 27,83	830 ***	830 830	3	6.8	2	33725	2	1	68	D
MAR 2,83	MAR 1,83	830 830	1200 830	2	0.5	2	33730	2	1	****	KEI
MAR 3,83	MAR 2,83	830 830	1200 830	2	0.6	2	33732	2	1	****	EIK
MAR 5,83	MAR 4,83	830 830	830 830	2	0.6	2	33735	2	1	****	E
MAR 6,83	MAR 5,83	830 830	830 830	1	0.3	2	33737	2	1	202	D
MAR 7,83	MAR 6,83	830 830	830 830	1	0.4	2	33739	2	1	95	D
MAR 8,83	MAR 7,83	830 830	830 830	1	6.3	2	33741	2	1	127	D
MAR 9,83	MAR 8,83	830 830	1600 830	2	1.1	2	33743	2	1	22	FL
MAR 16,83	MAR 15,83	830 830	1500 730	3	0.9	2	33745	2	1	98	D
MAR 17,83	MAR 16,83	830 830	830 1300	3	0.4	2	33747	2	1	15	E
MAR 18,83	MAR 17,83	830 830	1500 2400	2	2.3	2	33749	2	1	****	IK
MAR 31,83	MAR 30,83	830 830	830 300	3	1.0	2	33751	2	1	62	C
APR 1,83	MAR 31,83	830 830	300 830	1	3.3	2	33754	2	1	****	E
APR 2,83	APR 1,83	830 830	300 830	1	3.3	2	33755	2	1	119	CD
APR 11,83	APR 10,83	830 830	830 1200	3	0.3	2	33758	2	1	96	D
APR 13,83	APR 12,83	830 830	1100 1930	3	7.2	2	33759	2	1	12	D
APR 14,83	APR 13,83	830 830	300 830	2	1.5	2	33761	2	1	51	D
APR 25,83	APR 24,83	800 830	1630 830	2	9.7	2	33765	2	1	100	D
APR 29,83	APR 28,83	800 800	2030 800	3	3.0	1	33766	2	1	91	D
MAY 4,83	MAY 3,83	830 830	2200 700	3	2.0	1	33767	2	1	101	D
MAY 13,83	MAY 12,83	830 830	2400 800	1	5.0	1	33768	2	1	38	D
MAY 19,83	MAY 18,83	800 800	1400 1530	1	0.6	1	33771	2	1	65	CD
MAY 20,83	MAY 19,83	800 800	1730 1900	1	1.0	1	33772	2	1	31	DE
MAY 21,83	MAY 20,83	800 800	1730 2200	1	0.2	1	33773	2	1	96	D
MAY 22,83	MAY 21,83	800 800	300 600	1	3.8	1	33774	2	1	36	DE
MAY 23,83	MAY 22,83	800 800	1300 1900	1	0.3	1	33775	2	1	98	CD
MAY 24,83	MAY 23,83	800 830	300 830	1	2.0	1	33776	2	1	96	CD
MAY 28,83	MAY 27,83	800 800	300 600	1	0.1	1	33787	2	1	****	EK
MAY 29,83	MAY 28,83	800 800	300 600	1	0.1	1	33788	2	1	104	D
MAY 30,83	MAY 29,83	800 800	900 700	1	27.2	1	33789	2	1	64	D
MAY 31,83	MAY 30,83	830 830	830 1130	1	1.3	1	33790	2	1	63	CD
JUN 3,83	JUN 2,83	800 800	830 2100	1	1.2	1	33791	2	1	86	CD
JUN 4,83	JUN 3,83	800 800	1530 1630	1	1.6	1	33792	2	1	100	D
JUN 5,83	JUN 4,83	930 930	2300 930	1	17.2	1	33793	2	1	93	D
JUN 6,83	JUN 5,83	930 900	930 1800	1	11.0	1	33794	2	1	80	D
JUN 9,83	JUN 8,83	930 900	1100 1130	1	0.7	1	33794	2	1	94	D
JUN 11,83	JUN 10,83	830 830	1800 1930	1	2.4	1	33807	2	1	****	EK
		830 830	2030 2100	1	0.2	1	33809	2	1		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TNSP/DAILY/AEROCHEM #13									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMH/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	PAGE : 2
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****	
JAN 24,83	JAN 23,83	18.0	*****	*****	4.47	0.0604	*****	*****	
FEB 12,83	FEB 11,83	236.0	12.4	*****	4.46	0.0592	0.70	0.24	
FEB 28,83	FEB 27,83	300.0	26.0	*****	4.45	0.0638	2.85	0.70	
MAR 2,83	MAR 1,83	*****	*****	*****	*****	*****	*****	*****	
MAR 3,83	MAR 2,83	*****	*****	*****	*****	*****	*****	*****	
MAR 5,83	MAR 4,83	*****	*****	*****	*****	*****	*****	*****	
MAR 6,83	MAR 5,83	52.0	*****	*****	*****	*****	*****	*****	
MAR 7,83	MAR 6,83	387.0	35.6	*****	4.19	0.0966	20.00	3.40	U
MAR 8,83	MAR 7,83	90.0	48.2	*****	3.98	0.1434	3.35	0.47	
MAR 9,83	MAR 8,83	16.0	*****	*****	4.74	0.0458	3.50	0.50	
MAR 14,83	MAR 13,83	57.0	*****	*****	*****	*****	*****	0.68	
MAR 17,83	MAR 16,83	4.0	*****	*****	*****	*****	*****	*****	
MAR 18,83	MAR 17,83	*****	*****	*****	*****	*****	*****	0.81	
MAR 31,83	MAR 30,83	40.0	*****	*****	*****	*****	*****	*****	
APR 1,83	MAR 31,83	*****	*****	*****	*****	*****	*****	*****	
APR 2,83	APR 1,83	23.0	*****	*****	*****	*****	*****	*****	
APR 11,83	APR 10,83	466.0	9.4	*****	4.83	0.0300	7.50	1.32	G
APR 13,83	APR 12,83	12.0	*****	*****	4.13	0.0530	0.75	0.08	
APR 14,83	APR 13,83	322.0	15.2	*****	4.59	0.0304	1.25	0.10	
APR 25,83	APR 24,83	194.0	29.1	*****	6.12	0.0240	4.65	0.71	
APR 29,83	APR 28,83	117.0	*****	*****	5.66	0.0282	1.05	0.18	
MAY 4,83	MAY 3,83	324.0	6.9	*****	5.18	0.0282	0.75	0.11	
MAY 13,83	MAY 12,83	15.0	*****	*****	*****	0.0368	*****	0.92	G
MAY 19,83	MAY 18,83	42.0	*****	*****	5.26	*****	4.45	0.10	
MAY 20,83	MAY 19,83	4.0	*****	*****	*****	0.0380	1.00	0.13	
MAY 21,83	MAY 20,83	235.0	10.6	*****	4.80	0.0282	0.65	0.21	
MAY 22,83	MAY 21,83	7.0	*****	*****	5.22	0.0232	0.90	0.13	
MAY 23,83	MAY 22,83	366.0	8.0	*****	5.44	0.0232	0.90	0.13	
MAY 24,83	MAY 23,83	124.0	*****	*****	*****	0.0332	1.15	0.10	
MAY 28,83	MAY 27,83	*****	*****	*****	5.10	0.0332	1.15	0.10	
MAY 29,83	MAY 28,83	1818.0	11.0	*****	*****	0.0332	1.15	0.10	
MAY 30,83	MAY 29,83	54.0	*****	*****	*****	0.0332	1.15	0.10	
MAY 31,83	MAY 30,83	49.0	*****	*****	*****	0.0332	1.15	0.10	
JUN 3,83	JUN 2,83	89.0	*****	*****	7.14	0.0164	4.60	0.83	G
JUN 4,83	JUN 3,83	1108.0	9.8	*****	6.98	0.0308	1.15	0.16	
JUN 5,83	JUN 4,83	657.0	5.5	*****	4.86	0.0350	1.15	0.17	
JUN 6,83	JUN 5,83	36.0	*****	*****	5.06	0.0260	0.60	0.07	
JUN 9,83	JUN 8,83	145.0	*****	*****	5.70	0.0202	0.45	0.04	
JUN 11,83	JUN 10,83	*****	*****	*****	5.53	0.0246	1.70	0.29	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 16,83	JAN 15,83	*****	*****	*****	*****	*****	*****	*****
JAN 24,83	JAN 23,83	*****	*****	*****	*****	*****	*****	0.0339
FEB 12,83	FEB 11,83	0.03	0.08	<W	0.015	0.030	0.090	0.0347
FEB 28,83	FEB 27,83	0.20	0.09	0.015	0.025	0.060	0.980	0.0355
MAR 2,83	MAR 1,83	*****	*****	*****	*****	*****	*****	*****
MAR 3,83	MAR 2,83	*****	*****	*****	*****	*****	*****	*****
MAR 5,83	MAR 4,83	*****	*****	*****	*****	*****	*****	*****
MAR 6,83	MAR 5,83	*****	U 0.88	*****	*****	*****	*****	*****
MAR 7,83	MAR 6,83	0.15	0.06	0.010	0.025	0.040	0.430	0.0646
MAR 8,83	MAR 7,83	0.07	0.07	<T	0.035	0.060	*****	0.1047
MAR 9,83	MAR 8,83	*****	*****	*****	*****	*****	*****	*****
MAR 14,83	MAR 13,83	*****	0.15	*****	*****	*****	1.090	0.0182
MAR 17,83	MAR 16,83	*****	*****	*****	*****	*****	*****	*****
MAR 18,83	MAR 17,83	*****	*****	*****	*****	*****	*****	*****
MAR 31,83	MAR 30,83	*****	0.17	*****	0.080	*****	*****	*****
APR 1,83	MAR 31,83	*****	*****	*****	*****	*****	*****	*****
APR 2,83	APR 1,83	*****	0.25	*****	*****	*****	*****	*****
APR 11,83	APR 10,83	0.05	0.03	0.010	0.030	0.030	<T 0.020	0.0148
APR 13,83	APR 12,83	*****	*****	*****	*****	*****	*****	0.0741
APR 14,83	APR 13,83	0.06	<W 0.01	0.010	0.020	0.010	0.048	0.0257
APR 25,83	APR 24,83	U 2.01	0.13	U 0.180	U 0.155	U 0.130	1.550	U 0.0008
APR 29,83	APR 28,83	0.17	0.02	0.030	0.035	0.020	0.400	0.0022
MAY 4,83	MAY 3,83	0.13	0.02	0.025	0.040	0.020	0.144	0.0066
MAY 13,83	MAY 12,83	*****	*****	*****	*****	*****	*****	*****
MAY 19,83	MAY 18,83	*****	0.11	*****	*****	*****	0.284	0.0055
MAY 20,83	MAY 19,83	*****	*****	*****	*****	*****	*****	*****
MAY 21,83	MAY 20,83	0.09	0.04	0.015	0.045	0.080	0.284	0.0158
MAY 22,83	MAY 21,83	*****	*****	*****	*****	*****	*****	*****
MAY 23,83	MAY 22,83	0.09	0.03	0.015	0.025	0.010	0.236	0.0060
MAY 24,83	MAY 23,83	0.17	<W 0.01	0.030	0.035	0.025	0.230	0.0036
MAY 28,83	MAY 27,83	*****	*****	*****	*****	*****	*****	*****
MAY 29,83	MAY 28,83	0.08	0.02	0.020	0.030	0.020	0.178	0.0079
MAY 30,83	MAY 29,83	*****	0.10	*****	0.040	0.055	*****	*****
MAY 31,83	MAY 30,83	*****	0.20	*****	*****	*****	*****	*****
JUN 3,83	JUN 2,83	*****	0.04	*****	*****	*****	0.250	0.0138
JUN 4,83	JUN 3,83	0.07	0.02	0.020	0.020	0.020	0.060	0.0087
JUN 5,83	JUN 4,83	<T 0.02	0.02	<W 0.005	<T 0.010	<T 0.010	0.440	0.0020
JUN 6,83	JUN 5,83	*****	0.12	*****	*****	*****	*****	0.0030
JUN 9,83	JUN 8,83	0.48	0.07	0.100	0.080	0.040	*****	*****
JUN 11,83	JUN 10,83	*****	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TMSD/DAILY/AEROCHEN #13											PAGE : 4
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN 02-SNOW 03-COMP/04-OTHER	01-STD. 02-NIPHER		02-APIOS 03-SPECIAL		01-MOE 03-AES		
JUN 15,83	JUN 14,83	830 830	1615 1830	1	3.2	1	33818	2	1	97	CD
JUN 16,83	JUN 15,83	830 830	1730 2000	1	11.0	1	33819	2	1	101	CD
JUN 17,83	JUN 16,83	830 830	1900 1920	1	0.2	1	33820	2	1	***	EK
JUN 23,83	JUN 22,83	830 830	845 930	1	9.4	1	33821	2	1	107	D
JUN 26,83	JUN 25,83	830 830	900 300	1	22.0	1	33822	2	1	95	CD
JUN 27,83	JUN 26,83	830 830	1500 1530	1	4.0	1	33823	2	1	U 77	CDPJ
JUN 30,83	JUN 29,83	830 830	300 ***	1	5.6	1	33825	2	1	89	D
JUL 1,83	JUN 30,83	830 830	1800 1900	1	3.6	1	33826	2	1	90	D
JUL 3,83	JUL 2,83	830 830	300 ***	1	25.0	1	33827	2	1	158	D
JUL 5,83	JUL 3,83	830 2030	600 1200	1	33.0	1	33831	2	1	U 19	DH
JUL 8,83	JUL 7,83	830 830	1715 1900	1	2.4	1	33832	2	1	39	CD
JUL 17,83	JUL 16,83	830 830	1800 1930	1	9.0	1	33835	2	1	U 106	DJ
JUL 19,83	JUL 18,83	830 830	1945 300	1	2.4	1	33837	2	1	87	
JUL 20,83	JUL 19,83	830 830	2100 830	1	0.3	1	33838	2	1	***	EK
JUL 24,83	JUL 23,83	830 830	1300 2000	1	2.2	1	33839	2	1	83	C
JUL 28,83	JUL 27,83	830 830	1830 2000	1	48.6	1	33848	2	1	U 104	ADJ
JUL 29,83	JUL 28,83	830 830	1650 1720	1	0.8	1	33849	2	1	U 44	DJ
JUL 31,83	JUL 30,83	830 830	1900 2030	1	2.8	1	33850	2	1	70	CD
AUG 1,83	JUL 31,83	830 830	1400 2000	1	6.8	1	33851	2	1	79	CD
AUG 3,83	AUG 2,83	830 830	1900 300	1	31.0	1	33852	2	1	U 105	CDJ
AUG 8,83	AUG 7,83	830 830	2145 2300	1	5.0	1	33853	2	1	98	CD
AUG 11,83	AUG 10,83	830 830	1045 300	1	13.2	1	33862	2	1	99	C
AUG 21,83	AUG 20,83	830 830	500 830	1	4.0	1	33863	2	1	86	C
AUG 22,83	AUG 21,83	830 900	830 1030	1	4.3	1	33864	2	1	93	
AUG 24,83	AUG 23,83	830 830	130 430	1	1.8	1	33865	2	1	77	
AUG 27,83	AUG 26,83	830 830	2400 130	1	0.6	1	33866	2	1	***	C
AUG 28,83	AUG 27,83	830 830	2230 2400	1	0.4	1	33867	2	1	***	KE
AUG 30,83	AUG 29,83	830 830	1330 1500	1	19.6	1	33869	2	1	U 107	J
SEP 6,83	SEP 4,83	830 1000	2000 2400	1	4.7	1	33870	2	1	71	
SEP 8,83	SEP 7,83	1100 1108	***	1	0.4	1	33871	2	1	***	E
SEP 9,83	SEP 8,83	1108 905	***	1	***	*	33872	2	1	***	
SEP 10,83	SEP 9,83	905 905	500 905	1	3.1	1	33873	2	1	68	CD
SEP 11,83	SEP 10,83	905 800	905 1200	1	11.7	1	33874	2	1	91	CD
SEP 14,83	SEP 13,83	830 830	1130 1730	1	4.7	1	33875	2	1	85	
SEP 16,83	SEP 15,83	830 830	2200 730	1	7.6	1	33876	2	1	90	
SEP 18,83	SEP 17,83	830 830	2145 2400	1	9.8	1	33877	2	1	98	CD
SEP 21,83	SEP 20,83	830 830	1145 1800	1	0.6	1	33878	2	1	44	C
SEP 22,83	SEP 21,83	830 830	900 1400	1	1.3	1	33879	2	1	82	
SEP 28,83	SEP 27,83	830 830	2100 ***	1	0.2	1	33888	2	1	***	E
SEP 29,83	SEP 28,83	830 830	1900 830	1	7.8	1	33889	2	1	92	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TNSP/DAILY/AEROCHEM #13										PAGE : 5	
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMH/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L			
JUN 15,83	JUN 14,83	200.0	U 61.0	*****	U 3.95	G 0.1506	U 6.70	0.20			
JUN 16,83	JUN 15,83	714.0	5.4	*****	5.34	0.0216	0.55	0.09			
JUN 17,83	JUN 16,83	*****	*****	*****	*****	*****	*****	*****			
JUN 23,83	JUN 22,83	646.0	23.5	*****	4.51	G 1.6580	3.50	0.28			
JUN 26,83	JUN 25,83	1352.0	22.3	*****	4.55	0.0516	3.25	0.31			
JUN 27,83	JUN 26,83	199.0	5.9	*****	5.03	0.0290	0.45	0.01			
JUN 30,83	JUN 29,83	323.0	24.0	*****	*****	*****	1.85	0.28			
JUL 1,83	JUN 30,83	210.0	4.8	*****	5.19	0.0228	0.35	0.07			
JUL 3,83	JUL 2,83	2543.0	6.8	*****	5.10	0.0258	0.65	0.12			
JUL 5,83	JUL 3,83	418.0	3.4	*****	5.87	0.0168	0.25	0.07			
JUL 8,83	JUL 7,83	61.0	*****	*****	6.89	0.0262	U 5.45	U 1.58			
JUL 17,83	JUL 16,83	613.0	8.0	*****	5.07	0.0270	0.85	0.13			
JUL 19,83	JUL 18,83	134.0	17.8	*****	4.59	0.0506	1.05	0.44			
JUL 20,83	JUL 19,83	*****	*****	*****	*****	*****	*****	*****			
JUL 24,83	JUL 23,83	118.0	2.4	*****	5.71	0.0200	<W 0.05	<W 0.01			
JUL 28,83	JUL 27,83	3269.0	12.7	*****	4.80	0.0370	1.50	0.10			
JUL 29,83	JUL 28,83	23.0	*****	*****	4.57	*****	*****	*****			
JUL 31,83	JUL 30,83	127.0	*****	*****	4.76	0.0402	1.10	0.19			
AUG 1,83	JUL 31,83	347.0	4.1	*****	5.26	0.0228	0.05	0.06			
AUG 3,83	AUG 2,83	2093.0	12.6	*****	4.99	0.0304	1.70	0.26			
AUG 8,83	AUG 7,83	316.0	8.7	*****	U 6.97	0.0170	0.90	0.20			
AUG 11,83	AUG 10,83	845.0	6.6	*****	5.06	0.0264	0.25	<W 0.01			
AUG 21,83	AUG 20,83	223.0	18.5	*****	4.65	0.0438	2.20	0.36			
AUG 22,83	AUG 21,83	257.0	11.9	*****	4.84	0.0352	1.30	0.14			
AUG 24,83	AUG 23,83	89.0	8.4	*****	*****	*****	0.40	0.10			
AUG 27,83	AUG 26,83	*****	*****	*****	*****	*****	*****	*****			
AUG 28,83	AUG 27,83	*****	*****	*****	*****	*****	*****	*****			
AUG 30,83	AUG 29,83	1350.0	5.4	*****	5.32	0.0246	0.25	0.09			
SEP 6,83	SEP 4,83	215.0	8.6	*****	5.10	0.0276	0.75	0.17			
SEP 8,83	SEP 7,83	*****	*****	*****	*****	*****	*****	*****			
SEP 9,83	SEP 8,83	799.0	7.1	*****	D 5.50	B 0.6040	1.10	0.20			
SEP 10,83	SEP 9,83	136.0	U 19.6	*****	U 4.74	U 0.0446	U 2.75	U 0.59			
SEP 11,83	SEP 10,83	689.0	4.1	*****	5.44	0.0210	0.30	0.06			
SEP 14,83	SEP 13,83	257.0	5.0	*****	5.09	0.0274	0.40	<W 0.01			
SEP 16,83	SEP 15,83	443.0	9.1	*****	4.76	0.0352	0.75	0.03			
SEP 18,83	SEP 17,83	617.0	G 32.6	*****	D 4.28	G 0.0816	3.80	0.47			
SEP 21,83	SEP 20,83	17.0	*****	*****	*****	*****	*****	*****			
SEP 22,83	SEP 21,83	69.0	*****	*****	5.03	0.0274	*****	*****			
SEP 28,83	SEP 27,83	*****	*****	*****	*****	*****	*****	*****			
SEP 29,83	SEP 28,83	461.0	17.5	*****	5.20	0.0292	2.90	0.49			

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM					#13	PAGE : 6		
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUN 15,83	JUN 14,83	0.40	U 0.37	0.090	U 0.215	U 0.165	0.510	U 0.1122
JUN 16,83	JUN 15,83	0.08	<T 0.01	0.020	0.075	<T 0.010	0.154	0.0046
JUN 17,83	JUN 16,83	*****	*****	*****	*****	*****	*****	*****
JUN 23,83	JUN 22,83	0.25	0.07	0.030	0.060	0.025	0.700	0.0309
JUN 26,83	JUN 25,83	0.31	0.09	0.030	0.045	0.025	0.600	0.0282
JUN 27,83	JUN 26,83	0.07	0.12	0.015	0.035	0.015	0.040	0.0093
JUN 30,83	JUN 29,83	*****	0.14	*****	*****	*****	0.172	*****
JUL 1,83	JUN 30,83	0.04	0.12	0.005	<T 0.010	<T 0.010	0.060	0.0065
JUL 3,83	JUL 2,83	0.09	0.14	0.015	0.020	0.030	0.142	0.0079
JUL 5,83	JUL 3,83	0.07	0.12	0.010	0.015	0.015	0.060	0.0013
JUL 8,83	JUL 7,83	*****	0.62	*****	*****	*****	*****	0.0001
JUL 17,83	JUL 16,83	0.13	<W 0.01	0.015	0.020	0.015	0.154	0.0085
JUL 19,83	JUL 18,83	0.09	0.07	0.015	0.035	0.040	0.230	0.0257
JUL 20,83	JUL 19,83	*****	*****	*****	*****	*****	*****	*****
JUL 24,83	JUL 23,83	*****	0.02	*****	*****	*****	<W	0.0019
JUL 28,83	JUL 27,83	0.10	<W 0.01	0.020	0.025	<T 0.005	0.300	0.0158
JUL 29,83	JUL 28,83	*****	*****	*****	*****	*****	*****	0.0269
JUL 31,83	JUL 30,83	0.29	0.06	0.075	0.070	0.030	*****	0.0174
AUG 1,83	JUL 31,83	0.01	0.01	<W 0.005	0.025	0.005	0.010	0.0055
AUG 3,83	AUG 2,83	0.29	0.03	0.050	0.035	<W 0.015	0.470	0.0102
AUG 8,83	AUG 7,83	0.58	0.04	0.130	0.090	0.020	0.330	U 0.0001
AUG 11,83	AUG 10,83	0.03	<W 0.01	0.005	0.010	0.015	0.044	0.0087
AUG 21,83	AUG 20,83	0.46	0.11	0.045	0.040	0.075	0.348	0.0224
AUG 22,83	AUG 21,83	0.21	0.06	0.020	0.075	0.115	0.220	0.0145
AUG 24,83	AUG 23,83	0.14	0.01	0.015	0.015	0.020	0.074	*****
AUG 27,83	AUG 26,83	*****	*****	*****	*****	*****	*****	*****
AUG 28,83	AUG 27,83	*****	*****	*****	*****	*****	*****	*****
AUG 30,83	AUG 29,83	0.06	<W 0.01	0.010	0.025	<W 0.005	0.166	0.0048
SEP 6,83	SEP 4,83	0.31	0.05	0.050	0.090	0.040	0.146	0.0079
SEP 8,83	SEP 7,83	*****	*****	*****	*****	*****	*****	*****
SEP 9,83	SEP 8,83	0.33	0.06	0.050	0.050	0.070	0.320	0.0032
SEP 10,83	SEP 9,83	U 0.59	U 0.26	U 0.053	U 0.155	U 0.245	U 0.570	U 0.0182
SEP 11,83	SEP 10,83	0.09	0.02	<W 0.005	0.055	0.055	0.124	0.0036
SEP 14,83	SEP 13,83	0.04	<W 0.01	<W 0.005	0.015	<T 0.005	0.124	0.0081
SEP 16,83	SEP 15,83	0.05	<W 0.01	<W 0.005	0.020	<T 0.010	0.068	0.0174
SEP 18,83	SEP 17,83	0.28	0.06	0.015	0.050	0.035	0.540	D 0.0525
SEP 21,83	SEP 20,83	*****	*****	*****	*****	*****	*****	*****
SEP 22,83	SEP 21,83	0.06	*****	0.010	<T 0.005	0.060	0.062	0.0093
SEP 28,83	SEP 27,83	*****	*****	*****	*****	*****	*****	*****
SEP 29,83	SEP 28,83	0.53	0.08	0.070	0.080	G 0.185	0.760	0.0063

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13										PAGE : 7		
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS	FIELD OFFICE
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-MOE 03-AES			
SEP 30.83	SEP 29.83	830 830	830 1230	1	33.8	1	33890	2	1	99	C	C
OCT 1.83	SEP 30.83	830 830	900 1100	1	3.2	1	33891	2	1	69	C	C
OCT 2.83	OCT 1.83	830 830	2200 200	1	2.2	1	33893	2	1	86	C	HCM
OCT 3.83	OCT 2.83	830 830	2030 2400	1	8.2	1	33895	2	1	99	C	C
OCT 8.83	OCT 7.83	830 830	900 1100	1	3.6	1	33897	2	1	70	C	C
OCT 11.83	OCT 10.83	830 830	1700 830	1	20.4	1	33899	2	1	101	C	C
OCT 12.83	OCT 11.83	830 830	830 1100	1	2.1	1	33903	2	1	138	C	N
OCT 13.83	OCT 12.83	830 830	830 1500	1	6.1	1	33905	2	1	73	C	CM
OCT 14.83	OCT 13.83	830 830	2230 750	3	2.0	1	33907	2	1	627	CP	NCH
OCT 16.83	OCT 15.83	830 830	1930 200	1	14.0	1	33909	2	1	68	C	C
OCT 17.83	OCT 16.83	830 830	830 830	1	2.0	1	33911	2	1	67	C	C
NOV 5.83	NOV 2.83	830 830	930 1030	3	0.2	2	33922	2	1	****	E	E
NOV 10.83	NOV 9.83	830 830	1000 1900	2	3.5	2	33918	2	1	****	K	K
NOV 14.83	NOV 13.83	830 830	1030 1800	2	1.8	2	33920	2	1	58	KF	KF
NOV 18.83	NOV 17.83	830 830	300 600	2	0.2	2	33925	2	1	****	C	Y2
NOV 21.83	NOV 19.83	830 830	1700 830	3	33.4	2	33926	2	1	90	C	C
NOV 22.83	NOV 21.83	830 830	830 1400	2	0.6	2	33930	2	1	62	J	J
NOV 23.83	NOV 22.83	830 830	2100 830	2	5.2	2	33933	2	1	****	FK	FK
NOV 24.83	NOV 23.83	830 830	830 830	3	28.0	2	33934	2	1	48	C	N
NOV 29.83	NOV 28.83	830 830	830 2200	3	11.6	2	33939	2	1	****	FK	FK
NOV 30.83	NOV 29.83	830 830	830 830	2	2.0	2	33940	2	1	****	E	E
DEC 1.83	NOV 30.83	830 830	830 830	2	0.3	2	33942	2	1	****	E	E
DEC 11.83	DEC 10.83	830 830	****	2	5.9	2	33946	2	1	****	FK	FK
DEC 12.83	DEC 11.83	830 830	830 1800	2	8.4	2	33948	2	1	****	FK	FK
DEC 14.83	DEC 13.83	830 830	1100 1800	2	4.0	2	33960	2	1	****	E	E
DEC 29.83	DEC 28.83	830 830	900 1100	2	0.2	2	33949	2	1	****	E	E

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TNSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 30,83	SEP 29,83	2166.0	5.1	*****	5.63	0.0180	0.60	0.07
OCT 1,83	SEP 30,83	142.0	G 27.2	*****	4.42	0.0662	3.15	0.43
OCT 2,83	OCT 1,83	122.0	8.7	*****	5.08	0.0290	0.80	0.20
OCT 3,83	OCT 2,83	524.0	4.5	*****	5.60	0.0182	0.25	0.08
OCT 8,83	OCT 7,83	162.0	7.2	*****	5.09	0.0258	0.65	0.08
OCT 11,83	OCT 10,83	1325.0	12.2	*****	4.77	0.0362	1.10	0.17
OCT 12,83	OCT 11,83	187.0	8.2	*****	4.96	0.0284	0.55	0.13
OCT 13,83	OCT 12,83	286.0	5.0	*****	5.26	0.0208	0.30	0.06
OCT 14,83	OCT 13,83	805.0	3.0	*****	5.42	0.0182	0.25	0.02
OCT 16,83	OCT 15,83	619.0	10.7	*****	4.73	0.0356	1.00	0.11
OCT 17,83	OCT 16,83	86.0	*****	*****	4.89	0.0342	1.40	0.30
NOV 3,83	NOV 2,83	*****	*****	*****	*****	*****	*****	*****
NOV 10,83	NOV 9,83	*****	*****	*****	*****	*****	*****	*****
NOV 14,83	NOV 13,83	68.0	*****	*****	4.74	0.0360	1.45	0.23
NOV 18,83	NOV 17,83	*****	*****	*****	*****	*****	*****	*****
NOV 21,83	NOV 19,83	1948.0	12.1	*****	4.71	0.0362	0.90	0.15
NOV 22,83	NOV 21,83	24.0	*****	*****	5.20	0.0244	*****	*****
NOV 23,83	NOV 22,83	*****	*****	*****	*****	*****	*****	*****
NOV 24,83	NOV 23,83	876.0	12.5	*****	4.66	D 0.0374	D 0.90	D 0.20
NOV 29,83	NOV 28,83	*****	*****	*****	*****	*****	*****	*****
NOV 30,83	NOV 29,83	*****	*****	*****	*****	*****	*****	*****
DEC 1,83	NOV 30,83	*****	*****	*****	*****	*****	*****	*****
DEC 11,83	DEC 10,83	*****	*****	*****	*****	*****	*****	*****
DEC 12,83	DEC 11,83	*****	*****	*****	*****	*****	*****	*****
DEC 14,83	DEC 13,83	*****	*****	*****	*****	*****	*****	*****
DEC 29,83	DEC 28,83	*****	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TNSP/DAILY/AEROCHEM					#13	PAGE : 9		
REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 30,83	SEP 29,83	0.10	<M	0.015	0.060	0.060	0.136	0.0023
OCT 1,83	SEP 30,83	0.27	0.07	0.030	0.050	0.150	0.390	0.0380
OCT 2,83	OCT 1,83	0.28	0.06	0.030	0.035	0.095	0.060	0.0083
OCT 3,83	OCT 2,83	0.03	<M	<T	<T	<T	0.010	0.0025
OCT 8,83	OCT 7,83	0.06	<M	0.010	<T	0.035	0.060	0.0001
OCT 11,83	OCT 10,83	0.04	<M	0.005	<T	0.015	0.138	0.0170
OCT 12,83	OCT 11,83	0.06	<M	0.010	<T	0.010	0.038	0.0110
OCT 13,83	OCT 12,83	0.03	<M	0.010	<T	0.020	<M	0.0055
OCT 14,83	OCT 13,83	0.02	<M	0.005	<M	0.015	<M	0.0038
OCT 16,83	OCT 15,83	0.06	<T	0.010	0.020	0.025	0.082	0.0186
OCT 17,83	OCT 16,83	0.12	<M	0.020	0.060	0.060	0.330	0.0129
NOV 3,83	NOV 2,83							
NOV 10,83	NOV 9,83							
NOV 14,83	NOV 13,83		0.18					
NOV 18,83	NOV 17,83							
NOV 21,83	NOV 19,83	0.05	0.03	0.005	0.050	0.050	0.020	0.0195
NOV 22,83	NOV 21,83							0.0063
NOV 23,83	NOV 22,83							
NOV 24,83	NOV 23,83	0.11	0.03	0.005	<M	<T	0.018	0.0219
NOV 29,83	NOV 28,83							
NOV 30,83	NOV 29,83							
DEC 1,83	NOV 30,83							
DEC 11,83	DEC 10,83							
DEC 12,83	DEC 11,83							
DEC 14,83	DEC 13,83							
DEC 29,83	DEC 28,83							

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR. HR.	PRECIP START/END HR. HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN	02-NIPHER	02-APIOS	03-SPECIAL	01-MOE	03-AES		
				02-SNOW	03-COMP/04-OTHER						
JAN 3,83	DEC 24,82	900 900	900 900	2	18.5	2	32548	2	1	57	C Y10
JAN 6,83	JAN 5,83	900 900	900 900	2	1.6	2	32549	2	1	47	D N
JAN 10,83	JAN 8,83	900 900	900 900	2	0.7	2	32550	2	1	144	D NY2
JAN 11,83	JAN 10,83	900 900	900 900	2	5.7	2	32551	2	1	62	D
JAN 17,83	JAN 16,83	900 900	900 900	2	8.9	2	32552	2	1	95	DG Y3
JAN 19,83	JAN 18,83	900 900	900 900	3	0.5	2	32553	2	1	34	N
JAN 30,83	JAN 29,83	900 900	900 900	3	5.0	2	32554	2	1	54	C
FEB 11,83	FEB 10,83	900 900	900 900	2	0.8	2	32555	2	1	113	D
FEB 15,83	FEB 14,83	900 900	900 900	1	1.1	2	32556	2	1	21	D N
FEB 18,83	FEB 17,83	900 900	900 900	3	3.3	2	32557	2	1	143	D NICH
FEB 20,83	FEB 18,83	900 900	900 900	3	17.1	2	32558	2	1	74	D HCMY2
FEB 27,83	FEB 26,83	900 900	900 900	3	5.2	2	32559	2	1	101	D
MAR 2,83	MAR 1,83	900 900	900 900	2	0.5	2	32560	2	1	150	E DGH
MAR 12,83	MAR 11,83	900 900	900 900	3	1.3	2	32561	2	1	150	E
MAR 18,83	MAR 17,83	900 900	900 900	3	0.7	2	32562	2	1	150	E
MAR 26,83	MAR 25,83	900 900	900 900	2	1.0	2	32563	2	1	150	E
APR 1,83	MAR 31,83	900 900	900 900	3	1.0	2	32564	2	1	150	E
APR 2,83	APR 1,83	900 900	900 900	3	1.0	2	32565	2	1	150	E
APR 13,83	APR 12,83	900 900	900 900	3	12.6	2	32566	2	1	150	E
APR 14,83	APR 13,83	900 900	900 900	2	5.7	2	32567	2	1	150	E
APR 16,83	APR 15,83	900 900	900 900	2	6.3	2	32568	2	1	150	E
APR 27,83	APR 26,83	900 900	900 900	1	1.3	2	32569	2	1	150	E
APR 28,83	APR 27,83	900 900	900 900	1	1.3	2	32570	2	1	150	E
MAY 13,83	MAY 12,83	900 900	900 900	1	5.3	2	32571	2	1	150	E
MAY 16,83	MAY 15,83	900 900	900 900	1	17.6	2	32572	2	1	150	E
MAY 21,83	MAY 20,83	900 900	900 900	1	2.2	2	32573	2	1	150	E
MAY 28,83	MAY 27,83	900 900	900 900	1	0.1	2	32574	2	1	150	E
MAY 30,83	MAY 29,83	900 900	900 900	1	18.8	2	32575	2	1	150	E
JUN 16,83	JUN 15,83	900 900	900 900	1	10.9	1	32576	2	1	150	E
JUN 30,83	JUN 29,83	900 900	900 900	1	34.0	1	32577	2	1	150	E
JUL 4,83	JUL 3,83	900 900	900 900	1	3.5	1	32578	2	1	150	E
JUL 5,83	JUL 4,83	900 900	900 900	1	2.3	1	32579	2	1	150	E
JUL 15,83	JUL 14,83	900 900	900 900	1	9.8	1	32580	2	1	150	E
JUL 29,83	JUL 28,83	900 900	900 900	1	33.6	1	32581	2	1	150	E
JUL 31,83	JUL 30,83	900 900	900 900	1	22.8	1	32582	2	1	150	E
AUG 2,83	AUG 1,83	900 900	900 900	1	1.5	1	32583	2	1	150	E
AUG 8,83	AUG 7,83	900 900	900 900	1	6.2	1	32584	2	1	150	E
AUG 10,83	AUG 9,83	900 900	900 900	1	9.8	1	32585	2	1	150	E
AUG 18,83	AUG 17,83	900 900	900 900	1		1	32586	2	1	150	E

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	
JAN 3,83	DEC 24,82	678.0	18.6	*****	4.37	0.0620	1.45	0.36	
JAN 6,83	JAN 5,83	49.0	*****	*****	4.63	0.0508	1.45	0.58	
JAN 10,83	JAN 8,83	65.0	*****	*****	5.44	0.0302	0.80	0.19	
JAN 11,83	JAN 10,83	227.0	24.8	*****	4.33	0.0770	1.85	0.62	
JAN 17,83	JAN 14,83	545.0	4.9	*****	5.04	0.0342	0.25	0.09	
JAN 19,83	JAN 18,83	11.0	*****	*****	*****	*****	*****	*****	
JAN 30,83	JAN 29,83	176.0	14.5	*****	4.61	0.0498	1.20	0.38	
FEB 11,83	FEB 10,83	58.0	*****	*****	*****	*****	0.95	1.09	
FEB 15,83	FEB 14,83	15.0	*****	*****	*****	*****	*****	*****	
FEB 18,83	FEB 17,83	304.0	3.5	*****	7.32	0.0374	0.15	0.05	
FEB 20,83	FEB 18,83	819.0	7.9	*****	6.83	0.0210	0.70	0.17	
FEB 27,83	FEB 26,83	338.0	26.7	*****	5.23	0.0376	4.05	0.89	
MAR 2,83	MAR 1,83	*****	*****	*****	*****	*****	*****	*****	
MAR 12,83	MAR 11,83	125.0	*****	*****	4.64	0.0472	3.35	0.45	
MAR 18,83	MAR 17,83	*****	*****	*****	*****	*****	*****	*****	
MAR 26,83	MAR 25,83	*****	*****	*****	*****	*****	*****	*****	
APR 1,83	MAR 31,83	406.0	20.5	*****	4.48	0.0542	2.00	0.32	
APR 2,83	APR 1,83	437.0	15.9	*****	4.58	0.0432	1.20	0.22	
APR 13,83	APR 12,83	88.0	*****	*****	*****	*****	1.35	0.21	
APR 14,83	APR 13,83	206.0	15.1	*****	4.54	0.0524	1.30	0.13	
APR 16,83	APR 15,83	95.0	*****	*****	5.47	0.1158	0.25	0.01	<W
APR 27,83	APR 26,83	277.0	13.6	*****	5.77	0.0228	1.65	0.31	
APR 28,83	APR 27,83	334.0	8.3	*****	4.69	0.0226	1.40	0.21	
MAY 13,83	MAY 12,83	424.0	20.1	*****	4.57	0.0514	2.80	0.38	
MAY 16,83	MAY 15,83	48.0	*****	*****	4.82	0.0600	3.80	0.98	G
MAY 21,83	MAY 20,83	248.0	10.9	*****	5.11	0.0354	1.15	0.18	
MAY 28,83	MAY 27,83	1258.0	11.4	*****	*****	0.0298	2.15	0.15	
MAY 29,83	MAY 28,83	216.0	*****	*****	*****	*****	*****	*****	
MAY 30,83	MAY 29,83	*****	*****	*****	*****	*****	*****	*****	
JUN 16,83	JUN 15,83	1179.0	2.4	*****	5.57	0.0184	0.05	0.03	
JUN 30,83	JUN 29,83	933.0	8.4	*****	4.96	0.0290	0.80	0.11	
JUL 4,83	JUL 2,83	2110.0	7.5	*****	5.03	0.0264	0.40	0.17	
JUL 5,83	JUL 4,83	183.0	2.3	*****	5.63	0.0172	0.05	0.02	<W
JUL 15,83	JUL 14,83	97.0	*****	*****	4.92	0.0376	2.50	0.40	
JUL 29,83	JUL 28,83	318.0	18.7	*****	4.61	0.0502	1.80	0.50	
JUL 31,83	JUL 30,83	1840.0	8.4	*****	5.01	0.0292	0.75	0.14	
AUG 2,83	AUG 1,83	1359.0	7.4	*****	5.11	0.0292	0.60	0.18	
AUG 8,83	AUG 7,83	53.0	*****	*****	6.90	0.0164	0.95	0.30	
AUG 10,83	AUG 9,83	353.0	10.3	*****	4.90	0.0362	0.85	0.15	
AUG 18,83	AUG 17,83	689.0	4.9	*****	5.83	0.0204	0.55	0.11	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LBN MG/L
JAN 3,83	DEC 24,82	0.06	0.08	0.005	<T	0.010	0.020	0.0427
JAN 6,83	JAN 5,83	0.14	0.16	0.055	0.030	0.040	0.040	0.0234
JAN 10,83	JAN 8,83	<T	0.10	0.010	0.020	<T	0.010	0.0036
JAN 11,83	JAN 10,83	<T	0.05	0.010	0.015	0.020	0.010	0.0468
JAN 17,83	JAN 14,83	0.01	0.05	0.010	0.015	0.020	0.010	0.0091
JAN 19,83	JAN 16,83	0.05	0.17	0.020	0.030	0.190	0.420	0.0245
JAN 30,83	JAN 29,83	0.05	0.14	0.020	0.030	0.190	0.420	0.0245
FEB 11,83	FEB 10,83	0.04	0.03	0.005	0.005	0.010	0.020	0.0000
FEB 15,83	FEB 14,83	0.06	0.06	0.005	0.020	0.030	0.198	0.0001
FEB 18,83	FEB 17,83	0.34	0.09	0.020	0.030	0.060	1.760	0.0059
FEB 20,83	FEB 18,83	0.06	0.06	0.005	0.020	0.030	0.198	0.0001
FEB 27,83	FEB 26,83	0.34	0.09	0.020	0.030	0.060	1.760	0.0059
MAR 2,83	MAR 1,83	0.52	0.14	0.050	0.010	0.070	0.640	0.0229
MAR 12,83	MAR 11,83	0.08	0.19	0.020	0.120	0.150	0.262	0.0331
MAR 18,83	MAR 17,83	0.07	0.05	0.010	0.240	0.150	0.104	0.0263
MAR 26,83	MAR 25,83	0.08	0.19	0.020	0.055	0.065	0.044	0.0288
APR 1,83	MAR 31,83	0.07	0.05	0.010	0.030	0.030	0.016	0.0034
APR 2,83	APR 1,83	0.22	0.16	0.025	0.040	0.035	0.006	0.0017
APR 13,83	APR 12,83	0.10	0.05	0.015	0.045	0.035	0.360	0.0204
APR 14,83	APR 13,83	0.11	0.03	0.015	0.040	0.035	0.166	0.0151
APR 16,83	APR 15,83	0.77	0.05	0.100	0.060	0.050	0.310	0.0078
APR 27,83	APR 26,83	0.23	0.04	0.040	0.030	0.040	0.002	0.0027
APR 28,83	APR 27,83	0.60	0.08	0.105	0.060	0.050	0.088	0.0110
MAY 13,83	MAY 12,83	0.12	0.20	0.030	0.090	0.135	0.114	0.0093
MAY 16,83	MAY 15,83	0.31	0.10	0.060	0.090	0.135	0.018	0.0023
MAY 21,83	MAY 20,83	0.08	0.08	0.030	0.060	0.045	0.580	0.0120
MAY 28,83	MAY 27,83	0.08	0.10	0.060	0.090	0.135	0.480	0.0245
MAY 29,83	MAY 28,83	0.08	0.10	0.060	0.090	0.135	0.184	0.0098
MAY 30,83	MAY 29,83	0.08	0.10	0.060	0.090	0.135	0.0078	0.0001
MAY 30,83	MAY 29,83	0.08	0.10	0.060	0.090	0.135	0.222	0.0126
JUN 16,83	JUN 15,83	0.02	0.11	0.005	0.015	0.010	0.216	0.0015
JUN 30,83	JUN 29,83	0.08	0.01	0.015	0.095	0.015	0.088	0.0110
JUL 4,83	JUL 2,83	0.07	0.01	0.010	0.030	0.020	0.114	0.0093
JUL 5,83	JUL 4,83	0.03	0.01	0.005	0.070	0.105	0.018	0.0023
JUL 15,83	JUL 14,83	0.53	0.07	0.075	0.070	0.105	0.580	0.0120
JUL 29,83	JUL 28,83	0.25	0.10	0.025	0.045	0.040	0.480	0.0245
JUL 31,83	JUL 30,83	0.04	0.03	0.015	0.045	0.040	0.184	0.0098
AUG 2,83	AUG 1,83	0.10	0.02	0.025	0.040	0.040	0.0078	0.0001
AUG 8,83	AUG 7,83	0.09	0.14	0.010	0.035	0.020	0.222	0.0126
AUG 10,83	AUG 9,83	0.19	0.06	0.010	0.035	0.020	0.216	0.0015
AUG 18,83	AUG 17,83	0.19	0.03	0.025	0.030	0.005	0.216	0.0015

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ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15										PAGE : 4	
REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(M)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICI- ENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-HOE		
				02-SHOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COHP/04-OTHER							
AUG 19,83	AUG 18,83	900 900	900 900	1	3.7	1	32595	2	1	72	CD
AUG 24,83	AUG 23,83	900 900	1400 1700	1	42.2	1	32596	2	1	103	CD
SEP 9,83	SEP 8,83	900 900	2300	1	38.1	1	32597	2	1	90	BCD
SEP 10,83	SEP 9,83	900 900	900 900	1	8.8	1	32598	2	1	92	HH
SEP 13,83	SEP 12,83	900 900	900 900	1	3.2	1	32599	2	1	37	HH
SEP 16,83	SEP 15,83	900 900	900 900	1	12.0	1	32600	2	1	75	C
SEP 20,83	SEP 19,83	900 900	900 900	1	10.3	1	32601	2	1	98	
OCT 5,83	OCT 4,83	900 900	900 900	1	6.6	1	32131	2	1	87	CD
OCT 6,83	OCT 5,83	900 900	900 900	1	6.8	1	32132	2	1	85	HC
OCT 7,83	OCT 6,83	900 900	900 900	1	3.1	1	32133	2	1	61	HCM
OCT 8,83	OCT 7,83	900 900	900 900	1	23.0	1	32134	2	1	81	C
OCT 13,83	OCT 12,83	900 900	900 900	3	8.8	1	32135	2	1	79	HCM
OCT 16,83	OCT 15,83	900 900	900 900	1	14.8	1	32603	2	1	78	CD
OCT 19,83	OCT 18,83	900 900	900 900	1	1.2	1	32604	2	1	78	CD
OCT 24,83	OCT 23,83	900 900	900 900	1	1.0	1	32605	2	1	74	E
OCT 25,83	OCT 24,83	900 900	900 900	1	2.9	1	32606	2	1	74	E
NOV 14,83	NOV 4,83	900 900	900 900	3	1.3	2	32607	2	1	23	E
NOV 22,83	NOV 19,83	900 900	900 900	2	28.0	1	32608	2	1	31	NY10
NOV 24,83	NOV 23,83	900 900	900 900	2	13.8	2	32611	2	1	4	Y3
NOV 29,83	NOV 28,83	900 900	900 900	2	1.4	2	32612	2	1	4	HCM
DEC 1,83	NOV 30,83	900 900	900 900	2	17.9	2	32613	2	1	47	N
DEC 12,83	DEC 10,83	900 900	900 900	2	2.7	2	32614	2	1	85	NY2
DEC 14,83	DEC 13,83	900 900	900 900	2	1.8	2	32615	2	1	85	CD
DEC 15,83	DEC 14,83	900 900	900 900	2		2	32616	2	1	35	C

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEN #15

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 19,83	AUG 18,83	172.0	21.0	*****	4.70	0.0518	2.40	0.61
AUG 24,83	AUG 23,83	2808.0	5.6	*****	5.40	0.0270	0.50	0.11
SEP 9,83	SEP 8,83	2203.0	5.1	*****	6.42	0.0170	0.60	0.11
SEP 10,83	SEP 9,83	522.0	3.4	*****	5.38	0.0228	0.10	<W
SEP 13,83	SEP 12,83	77.0	*****	*****	4.76	0.0368	0.05	<W
SEP 16,83	SEP 15,83	502.0	D 16.6	*****	4.55	0.0524	1.90	0.01
SEP 20,83	SEP 19,83	653.0	11.4	*****	4.68	0.0402	1.05	0.25
OCT 5,83	OCT 4,83	370.0	9.6	*****	4.93	0.0324	0.85	0.10
OCT 6,83	OCT 5,83	372.0	5.0	*****	5.52	0.0208	0.60	0.16
OCT 7,83	OCT 6,83	122.0	4.3	*****	6.37	0.0128	0.15	0.01
OCT 8,83	OCT 7,83	1207.0	10.0	*****	4.84	0.0356	0.90	0.09
OCT 13,83	OCT 12,83	446.0	4.4	*****	5.37	0.0208	0.30	0.11
OCT 16,83	OCT 15,83	748.0	10.5	*****	4.86	0.0322	0.90	0.02
OCT 19,83	OCT 18,83	*****	*****	*****	*****	*****	*****	*****
OCT 24,83	OCT 23,83	*****	*****	*****	*****	*****	*****	*****
OCT 25,83	OCT 24,83	138.0	11.6	*****	4.96	0.0302	1.20	0.29
NOV 14,83	NOV 4,83	20.0	*****	*****	*****	*****	*****	*****
NOV 22,83	NOV 19,83	2233.0	10.5	*****	4.70	0.0344	0.75	0.12
NOV 24,83	NOV 23,83	572.0	2.8	*****	5.51	0.0176	0.05	0.01
NOV 29,83	NOV 28,83	44.0	*****	*****	*****	*****	*****	*****
DEC 1,83	NOV 30,83	*****	*****	*****	*****	*****	*****	*****
DEC 12,83	DEC 10,83	546.0	10.0	*****	4.73	0.0344	0.55	0.16
DEC 14,83	DEC 13,83	148.0	6.2	*****	5.06	0.0246	0.25	0.13
DEC 15,83	DEC 14,83	41.0	*****	*****	*****	*****	*****	*****

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STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

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REMOVAL DATE	EXPOSURE DATE	CALCIUM	CHLORIDE	MAGNESIUM	POTASSIUM	SODIUM	AMMONIUM AS N	FREE H LAB
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
AUG 19,83	AUG 18,83	0.38	0.09	0.050	0.045	0.030	0.680	0.0200
AUG 24,83	AUG 23,83	0.10	0.03	0.010	0.055	0.070	0.166	0.0060
SEP 9,83	SEP 8,83	0.27	<M	0.050	0.035	0.040	0.314	G
SEP 10,83	SEP 9,83	0.06	0.01	0.010	0.015	<M	0.108	0.0042
SEP 13,83	SEP 12,83	0.07	<M	0.010	0.025	0.025	0.010	0.0174
SEP 16,83	SEP 15,83	D	D	0.020	0.030	<T	0.278	D
SEP 20,83	SEP 19,83	<T	0.02	0.005	0.015	<T	0.168	0.0209
OCT 5,83	OCT 4,83	0.05	<M	0.010	0.035	0.025	0.240	0.0117
OCT 6,83	OCT 5,83	0.03	<M	0.015	0.020	0.015	0.030	0.0030
OCT 7,83	OCT 6,83	0.05	0.04	0.010	0.025	0.040	0.066	G
OCT 8,83	OCT 7,83	0.04	0.05	0.010	0.030	0.020	0.118	0.0145
OCT 13,83	OCT 12,83	<T	0.10	<T	<T	0.015	0.014	0.0043
OCT 16,83	OCT 15,83	0.03	<T	0.005	<T	0.010	D	0.0138
OCT 19,83	OCT 18,83	0.02	0.01	0.005	0.010	0.010	0.270	0.0138
OCT 24,83	OCT 23,83	0.07	0.06	0.010	0.060	0.045	0.430	0.0110
OCT 25,83	OCT 24,83	0.07	0.06	0.010	0.060	0.045	0.430	0.0110
NOV 14,83	NOV 4,83	0.05	0.02	0.005	<T	0.020	0.030	0.0200
NOV 22,83	NOV 19,83	0.05	0.02	0.005	<T	0.020	<T	0.0031
NOV 29,83	NOV 23,83	<T	<T	0.005	<T	0.010	0.002	0.0031
NOV 29,83	NOV 26,83	0.02	0.01	0.005	0.005	0.010	0.002	0.0031
DEC 1,83	NOV 30,83	0.02	0.02	0.005	0.005	0.010	0.036	0.0186
DEC 12,83	DEC 10,83	0.02	0.02	0.005	<M	0.010	0.036	0.0087
DEC 14,83	DEC 13,83	0.02	0.04	0.005	0.005	0.010	0.036	0.0087
DEC 15,83	DEC 14,83	0.02	0.04	0.005	0.005	0.010	0.036	0.0087

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-HOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
FEB 21,83	FEB 20,83	800 800	800 700	2	12.1	2	33143	2	1	***	FEI
FEB 28,83	FEB 27,83	800 800	1400 1000	2	7.1	2	33144	2	1	***	FIE
MAR 2,83	MAR 1,83	1000 1000	*** 900	2	1.3	2	33145	2	1	***	EFI
MAR 3,83	MAR 2,83	1000 1000	1200 1600	2	0.7	2	33146	2	1	***	EFI
MAR 5,83	MAR 4,83	1000 1000	1000 1800	2	***	2	33147	2	1	***	D
MAR 14,83	MAR 13,83	1000 1000	2100 1000	2	1.6	2	33149	2	1	57	D
MAR 18,83	MAR 17,83	800 800	1300 2100	2	2.3	2	33150	2	1	26	C
MAR 30,83	MAR 29,83	1000 1000	*** 1000	2	0.7	2	33151	2	1	***	K
APR 1,83	MAR 31,83	800 1400	1200 1400	3	4.1	2	33152	2	1	***	K
APR 11,83	APR 10,83	800 1000	900 1400	1	3.5	2	33153	2	1	***	E
APR 13,83	APR 12,83	800 800	600 800	2	0.2	2	33154	2	1	***	EK
APR 14,83	APR 13,83	800 800	800 800	2	6.3	2	33156	2	1	***	EK
APR 15,83	APR 14,83	800 800	800 800	3	16.3	2	33155	2	1	23	CD
APR 27,83	APR 26,83	800 800	1330 1600	1	3.4	2	33157	2	1	121	D
APR 29,83	APR 28,83	800 800	1200 1900	3	6.6	2	33158	2	1	100	CD
MAY 4,83	MAY 3,83	800 800	*** 800	3	4.4	2	33159	2	1	119	CD
MAY 13,83	MAY 12,83	800 800	1600 800	1	4.5	1	33162	2	1	99	CD
MAY 18,83	MAY 17,83	800 800	2000 800	1	2.6	1	33163	2	1	91	CD
MAY 20,83	MAY 19,83	800 800	1100 800	1	0.7	1	33164	2	1	439	CDP
MAY 21,83	MAY 20,83	800 800	700 800	1	0.3	2	33160	2	1	***	EK
MAY 22,83	MAY 21,83	800 800	800 900	1	0.1	2	33161	2	1	***	EK
MAY 24,83	MAY 23,83	800 800	*** 700	1	2.4	1	33165	2	1	89	HM
MAY 29,83	MAY 28,83	800 800	800 2000	1	25.2	1	33166	2	1	100	D
MAY 30,83	MAY 29,83	800 800	*** 800	1	0.4	1	33167	2	1	***	EK
JUN 3,83	JUN 2,83	800 800	1700 1800	1	0.5	1	33168	2	1	***	EK
JUN 4,83	JUN 3,83	800 800	1500 2000	1	19.8	1	33169	2	1	100	D
JUN 5,83	JUN 4,83	800 800	*** 800	1	0.8	1	33170	2	1	***	EK
JUN 9,83	JUN 8,83	800 800	1400 1600	1	2.0	1	33171	2	1	85	D
JUN 13,83	JUN 12,83	800 900	2200 800	1	6.5	1	33172	2	1	103	D
JUN 15,83	JUN 14,83	800 800	1200 2100	1	13.2	1	33173	2	1	102	D
JUN 16,83	JUN 15,83	800 800	1400 800	1	14.6	1	33174	2	1	102	D
JUN 17,83	JUN 16,83	800 800	1200 800	1	1.2	1	33175	2	1	***	EK
JUN 22,83	JUN 21,83	800 800	*** 700	1	50.0	1	33176	2	1	0	EG
JUN 25,83	JUN 24,83	800 600	*** 800	1	18.0	1	33177	2	1	34	BD
JUN 26,83	JUN 25,83	800 800	1200 1400	1	12.0	1	33178	2	1	45	D
JUN 27,83	JUN 26,83	800 800	1400 1630	1	3.2	1	33179	2	1	464	DP
JUN 30,83	JUN 29,83	800 800	*** 800	1	8.4	1	33180	2	1	91	D
JUL 1,83	JUL 30,83	800 800	*** 800	1	4.5	1	33181	2	1	98	D
JUL 4,83	JUL 3,83	800 800	*** 800	1	33.0	1	33182	2	1	96	CD
JUL 5,83	JUL 4,83	800 800	830 1200	1	6.0	1	33183	2	1	85	D

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH6.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
FEB 21,83	FEB 20,83	*****	*****	*****	*****	*****	*****	*****
FEB 26,83	FEB 27,83	*****	*****	*****	*****	*****	*****	*****
MAR 2,83	MAR 1,83	*****	*****	*****	*****	*****	*****	*****
MAR 3,83	MAR 2,83	*****	*****	*****	*****	*****	*****	*****
MAR 5,83	MAR 4,83	*****	*****	*****	*****	*****	*****	*****
MAR 14,83	MAR 13,83	156.0	30.0	*****	U 6.27	0.0276	5.40	0.87
MAR 18,83	MAR 17,83	59.0	*****	*****	U 7.01	0.0214	1.30	0.21
MAR 30,83	MAR 29,83	39.0	*****	*****	5.66	0.0162	0.15	<M 0.01
APR 1,83	MAR 31,83	*****	*****	*****	*****	*****	*****	*****
APR 11,83	APR 10,83	*****	*****	*****	*****	*****	*****	*****
APR 13,83	APR 12,83	*****	*****	*****	*****	*****	*****	*****
APR 14,83	APR 13,83	*****	*****	*****	*****	*****	*****	*****
APR 15,83	APR 14,83	241.0	13.7	*****	*****	*****	*****	*****
APR 27,83	APR 26,83	264.0	12.3	*****	4.59	0.0502	1.05	0.13
APR 29,83	APR 28,83	424.0	7.9	*****	U 6.78	0.0248	1.80	0.28
MAY 4,83	MAY 3,83	338.0	5.6	*****	5.59	0.0238	1.25	0.17
MAY 13,83	MAY 12,83	288.0	23.4	*****	5.76	0.0200	1.20	0.07
MAY 18,83	MAY 17,83	153.0	11.8	*****	4.42	0.0626	2.20	0.22
MAY 20,83	MAY 19,83	197.0	8.6	*****	6.32	0.0218	1.60	0.41
MAY 21,83	MAY 20,83	*****	*****	*****	5.61	0.0224	1.05	0.14
MAY 22,83	MAY 21,83	*****	*****	*****	*****	*****	*****	*****
MAY 24,83	MAY 23,83	138.0	*****	*****	6.91	0.0206	1.10	0.34
MAY 29,83	MAY 28,83	1621.0	6.6	*****	5.30	0.0238	0.80	0.13
MAY 30,83	MAY 29,83	*****	*****	*****	*****	*****	*****	*****
JUN 3,83	JUN 2,83	*****	*****	*****	*****	*****	*****	*****
JUN 4,83	JUN 3,83	1281.0	5.8	*****	5.18	0.0234	0.55	0.09
JUN 5,83	JUN 4,83	*****	*****	*****	*****	*****	*****	*****
JUN 9,83	JUN 8,83	110.0	*****	*****	6.78	0.0162	1.60	0.22
JUN 13,83	JUN 12,83	433.0	11.7	*****	5.05	0.0316	1.65	0.21
JUN 15,83	JUN 14,83	869.0	12.1	*****	4.80	0.0346	1.45	0.14
JUN 16,83	JUN 15,83	956.0	3.8	*****	5.46	0.0178	0.30	0.08
JUN 17,83	JUN 16,83	*****	*****	*****	*****	*****	*****	*****
JUN 22,83	JUN 21,83	5.0	*****	*****	*****	*****	*****	*****
JUN 25,83	JUN 24,83	398.0	18.0	*****	4.73	0.0436	2.65	0.25
JUN 26,83	JUN 25,83	347.0	18.3	*****	4.67	0.0470	2.70	0.25
JUN 27,83	JUN 26,83	953.0	18.0	*****	4.66	0.0452	2.65	0.25
JUN 30,83	JUN 29,83	495.0	14.6	*****	4.53	0.0454	1.30	0.16
JUL 1,83	JUN 30,83	284.0	3.3	*****	5.44	0.0178	0.25	0.03
JUL 4,83	JUL 1,83	2036.0	6.6	*****	5.02	0.0260	0.40	0.14
JUL 5,83	JUL 4,83	327.0	2.1	*****	5.60	0.0170	0.05	<T 0.02

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
FEB 21,83	FEB 20,83	*****	*****	*****	*****	*****	*****	*****
FEB 28,83	FEB 27,83	*****	*****	*****	*****	*****	*****	*****
MAR 2,83	MAR 1,83	*****	*****	*****	*****	*****	*****	*****
MAR 3,83	MAR 2,83	*****	*****	*****	*****	*****	*****	*****
MAR 5,83	MAR 4,83	U 1.98	U 0.45	U 0.120	U 0.225	U 0.310	1.090	U 0.0005
MAR 14,83	MAR 13,83	*****	U 0.45	*****	*****	*****	0.066	U 0.0001
MAR 18,83	MAR 17,83	*****	0.05	*****	*****	*****	*****	0.0022
MAR 30,83	MAR 29,83	*****	*****	*****	*****	*****	*****	*****
APR 1,83	MAR 31,83	*****	*****	*****	*****	*****	*****	*****
APR 11,83	APR 10,83	*****	*****	*****	*****	*****	*****	*****
APR 13,83	APR 12,83	*****	*****	*****	*****	*****	*****	*****
APR 14,83	APR 13,83	*****	*****	*****	*****	*****	*****	*****
APR 15,83	APR 14,83	0.09	0.02	0.010	0.030	0.025	0.028	0.0257
APR 27,83	APR 26,83	U 0.67	0.03	0.055	0.050	0.060	0.750	U 0.0002
APR 29,83	APR 28,83	0.15	0.01	0.025	0.030	0.015	0.430	0.0026
MAY 4,83	MAY 3,83	0.19	0.01	0.035	0.040	0.020	0.338	0.0017
MAY 13,83	MAY 12,83	0.26	0.04	0.050	0.035	0.040	0.148	0.0380
MAY 18,83	MAY 17,83	0.33	0.04	0.070	0.060	0.030	0.232	G 0.0005
MAY 20,83	MAY 19,83	0.18	0.10	0.035	0.100	0.065	0.670	0.0025
MAY 21,83	MAY 20,83	*****	*****	*****	*****	*****	*****	*****
MAY 22,83	MAY 21,83	*****	*****	*****	*****	*****	*****	*****
MAY 24,83	MAY 23,83	0.44	0.40	0.085	U 0.490	U 0.265	0.068	U 0.0001
MAY 29,83	MAY 28,83	0.24	0.03	0.060	0.045	0.045	0.156	0.0050
MAY 30,83	MAY 29,83	*****	*****	*****	*****	*****	*****	*****
JUN 3,83	JUN 2,83	*****	*****	*****	*****	*****	*****	*****
JUN 4,83	JUN 3,83	*****	0.03	*****	*****	*****	*****	*****
JUN 5,83	JUN 4,83	*****	*****	*****	*****	*****	0.134	0.0066
JUN 9,83	JUN 8,83	*****	0.34	*****	*****	*****	*****	*****
JUN 13,83	JUN 12,83	0.20	0.08	0.035	0.100	0.045	0.350	G 0.0002
JUN 15,83	JUN 14,83	0.08	0.14	0.015	0.045	0.035	0.420	0.0089
JUN 16,83	JUN 15,83	0.05	0.12	0.010	0.055	0.010	0.216	0.0158
JUN 17,83	JUN 16,83	*****	*****	*****	*****	*****	0.050	0.0035
JUN 22,83	JUN 21,83	*****	*****	*****	*****	*****	*****	*****
JUN 25,83	JUN 24,83	0.25	0.07	0.030	0.045	0.040	0.540	0.0186
JUN 26,83	JUN 25,83	0.25	0.07	0.030	0.035	0.020	0.540	0.0214
JUN 27,83	JUN 26,83	0.26	0.07	0.030	0.030	0.020	0.540	0.0219
JUN 30,83	JUN 29,83	0.07	0.01	0.010	0.020	0.015	0.124	0.0295
JUL 1,83	JUN 30,83	0.04	0.01	0.005	0.030	0.015	0.052	0.0036
JUL 4,83	JUL 1,83	0.08	<W 0.01	0.010	0.025	0.010	0.114	0.0095
JUL 5,83	JUL 4,83	0.06	<W 0.01	0.010	0.135	0.040	0.010	0.0025

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS FIELD OFFICE
				01-RAIN		01-STD.		02-APIOS	01-NOE		
				02-SNOW		02-NIPHER		03-SPECIAL	03-AES		
				03-COMP/04-OTHER							
JUL 17,83	JUL 16,83	800 800	1100 1500	1	30.3	1	33185	2	1	101	
JUL 19,83	JUL 18,83	800 800	2100 ****	1	12.0	1	33184	2	1	95	
JUL 24,83	JUL 23,83	800 800	1100 ****	1	2.0	1	33186	2	1	30	C N
JUL 26,83	JUL 27,83	800 800	1700 1800	1	17.0	1	33187	2	1	105	D
JUL 31,83	JUL 30,83	800 800	600 ****	1	25.0	1	33188	2	1	101	C
AUG 1,83	JUL 31,83	800 800	****	1	1.0	1	33189	2	1	****	E
AUG 3,83	AUG 2,83	800 800	1700 2200	1	13.0	1	33190	2	1	97	CD
AUG 6,83	AUG 7,83	800 800	2000 2200	1	7.0	1	33191	2	1	88	CD
AUG 10,83	AUG 9,83	800 1000	600 ****	1	7.2	1	33192	2	1	89	CD
AUG 11,83	AUG 10,83	1000 800	1000 1500	1	14.8	1	33193	2	1	96	CD
AUG 19,83	AUG 18,83	800 800	2100 300	1	2.8	1	33194	2	1	95	CD
AUG 22,83	AUG 21,83	800 800	1100 2200	1	11.0	1	33195	2	1	76	CD
AUG 24,83	AUG 23,83	800 800	2100 ****	1	5.6	1	33196	2	1	90	CD
AUG 28,83	AUG 27,83	800 800	1900 2300	1	24.2	1	33197	2	1	102	CD
AUG 30,83	AUG 29,83	800 800	1100 1400	1	6.2	1	33198	2	1	89	CD
SEP 2,83	SEP 1,83	800 800	2000 2100	1	0.4	1	33199	2	1	****	E
SEP 9,83	SEP 8,83	800 800	2300 100	1	32.1	1	33200	2	1	100	D
SEP 10,83	SEP 9,83	800 800	700 800	1	16.2	1	33201	2	1	97	HCM
SEP 13,83	SEP 12,83	800 800	1600 2000	1	0.5	1	33202	2	1	****	E
SEP 16,83	SEP 15,83	800 1000	1600 ****	1	6.2	1	33203	2	1	54	C
SEP 18,83	SEP 17,83	1900 2200	****	1	6.8	1	33204	2	1	56	C
SEP 21,83	SEP 20,83	800 800	1200 ****	1	7.4	1	33205	2	1	78	C
SEP 22,83	SEP 21,83	800 800	****	1	0.4	1	33206	2	1	****	E
SEP 29,83	SEP 28,83	800 800	1600 ****	1	6.0	1	33207	2	1	71	CD
SEP 30,83	SEP 29,83	800 800	****	1	7.0	1	33209	2	1	80	D
OCT 1,83	SEP 30,83	800 800	1000 800	1	25.3	1	33210	2	1	102	C
OCT 3,83	OCT 2,83	800 800	1200 800	1	10.8	1	33211	2	1	95	C
OCT 5,83	OCT 4,83	830 830	1200 ****	1	4.8	1	33212	2	1	83	C
OCT 6,83	OCT 5,83	830 800	1200 1630	1	2.2	1	33213	2	1	70	C
OCT 8,83	OCT 7,83	900 900	900 1500	1	3.1	1	33214	2	1	64	C
OCT 11,83	OCT 8,83	900 800	1200 800	1	16.6	1	33215	2	1	40	C
OCT 12,83	OCT 11,83	800 800	600 1000	1	0.5	1	33217	2	1	****	E
OCT 13,83	OCT 12,83	800 800	1200 1700	3	16.2	1	33218	2	1	71	CD
OCT 14,83	OCT 13,83	800 800	1100 1500	3	4.2	1	33219	2	1	79	C
OCT 17,83	OCT 14,83	800 800	1100 1600	1	11.6	1	33220	2	1	77	ACD
OCT 25,83	OCT 24,83	800 800	1000 1500	1	4.6	1	33222	2	1	74	HN
NOV 14,83	NOV 13,83	800 800	1000 800	2	1.2	2	33224	2	1	****	E
NOV 16,83	NOV 15,83	800 1000	****	1	0.1	1	33225	2	1	****	D
NOV 21,83	NOV 20,83	800 900	1600 900	3	32.4	2	33225	2	1	64	K
NOV 22,83	NOV 21,83	900 900	900 930	2	1.0	2	33226	2	1	****	

APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	PRECIP START/END HR.	SAMPLE TYPE	GAUGE DEPTH(MM)	GAUGE TYPE	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	SAMPLER EFFICIENCY (%)	COMMENTS
				01-RAIN 02-SNOW 03-COMP/04-OTHER		01-STD. 02-NIPHER		02-APIOS 03-SPECIAL	01-HOE 03-AES		FIELD OFFICE
NOV 23,83	NOV 22,83	900	1600	2	3.0	2	3327	2	1	***	K
NOV 24,83	NOV 23,83	900	900	2	62.2	2	3329	2	1	35	C
NOV 25,83	NOV 24,83	900	800	2	1.0	2	3321	2	1	***	K
NOV 29,83	NOV 28,83	800	1200	2	9.8	2	3323	2	1	42	K
NOV 30,83	NOV 29,83	800	1400	2	1.8	2	3324	2	1	***	K
DEC 2,83	DEC 1,83	900	1200	2	1.2	2	3325	2	1	***	K
DEC 5,83	DEC 2,83	900	1300	2	0.3	2	3326	2	1	***	E
DEC 8,83	DEC 5,83	900	1300	2	0.5	2	3327	2	1	***	E
DEC 12,83	DEC 11,83	900	900	2	10.4	2	3328	2	1	***	K
DEC 14,83	DEC 13,83	900	1000	2	3.2	2	3329	2	1	50	C
DEC 21,83	DEC 20,83	900	900	2	3.0	2	3340	2	1	***	KE
DEC 22,83	DEC 21,83	900	900	2	0.8	2	3341	2	1	***	KE

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14									
REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHIO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L	PAGE : 8
NOV 23,83	NOV 22,83	*****	*****	*****	*****	*****	*****	*****	
NOV 24,83	NOV 23,83	1407.0	3.0	*****	G 5.84	0.0164	<T 0.10	<T 0.02	
NOV 25,83	NOV 24,83	*****	*****	*****	*****	*****	*****	*****	
NOV 29,83	NOV 28,83	270.0	2.3	*****	G 5.82	0.0168	<T 0.10	<W 0.01	
NOV 30,83	NOV 29,83	*****	*****	*****	*****	*****	*****	*****	
DEC 2,83	DEC 1,83	*****	*****	*****	*****	*****	*****	*****	
DEC 5,83	DEC 2,83	*****	*****	*****	*****	*****	*****	*****	
DEC 8,83	DEC 5,83	*****	*****	*****	*****	*****	*****	*****	
DEC 12,83	DEC 11,83	339.0	3.0	*****	U 6.05	0.0152	<T 0.10	<T 0.02	
DEC 14,83	DEC 13,83	*****	*****	*****	*****	*****	*****	*****	
DEC 21,83	DEC 20,83	*****	*****	*****	*****	*****	*****	*****	
DEC 22,83	DEC 21,83	*****	*****	*****	*****	*****	*****	*****	

APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM

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